

886  
COUNTY BOROUGH OF WARRINGTON



# ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

AND

CHIEF PUBLIC HEALTH INSPECTOR

---

FOR THE YEAR

1969



COUNTY BOROUGH OF WARRINGTON



# ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR

1969

including the Report of the

CHIEF PUBLIC HEALTH INSPECTOR

---

**ERIC H. MOORE**


B.Sc., M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H., F.R.S.H.

*Medical Officer of Health*

**HEALTH AND WELFARE DEPARTMENT**

**SANKEY STREET, WARRINGTON**

(TEL. 33201)



Digitized by the Internet Archive  
in 2018 with funding from  
Wellcome Library

<https://archive.org/details/b30235376>

# CONTENTS

---

## INTRODUCTION :

COMMITTEES	...	...	...	...	...	...	...	5
STAFF	...	...	...	...	...	...	...	6
INTRODUCTORY LETTER	...	...	...	...	...	...	...	7

## GENERAL PUBLIC HEALTH SERVICES :

GENERAL INFORMATION	...	...	...	...	...	...	10
SUMMARY OF VITAL STATISTICS	...	...	...	...	...	...	11
VITAL STATISTICS 1950 - 1969	...	...	...	...	...	...	12
COMPARATIVE STATISTICS, 1969	...	...	...	...	...	...	13
CAUSES OF DEATH AT DIFFERENT PERIODS OF LIFE	...	...	...	...	...	...	14
PRINCIPAL CAUSES OF DEATH IN ORDER OF FREQUENCY	...	...	...	...	...	...	15
INFANT DEATHS	...	...	...	...	...	...	15
INFANT MORTALITY	...	...	...	...	...	...	15
CONTROL OF COMMUNICABLE DISEASES :							
NOTIFICATIONS RECEIVED DURING 1969	...	...	...	...	...	...	16
VENEREAL DISEASES	...	...	...	...	...	...	16
TUBERCULOSIS	...	...	...	...	...	...	16
PROPHYLACTIC MEASURES	...	...	...	...	...	...	18
NATIONAL ASSISTANCE ACTS, 1948 AND 1951	...	...	...	...	...	...	19
GENERAL MEDICAL SERVICES	...	...	...	...	...	...	23
NOTIFICATIONS OF BIRTH	...	...	...	...	...	...	24

## PERSONAL HEALTH SERVICES :

### MATERNAL AND CHILD CARE :

GENERAL	...	...	...	...	...	...	25
ANTE-NATAL AND POST-NATAL SERVICES	...	...	...	...	...	...	25
RELAXATION CLASSES	...	...	...	...	...	...	25
CHILD WELFARE	...	...	...	...	...	...	26
DENTAL CARE	...	...	...	...	...	...	29
DAY NURSERIES	...	...	...	...	...	...	30
CARE OF UNMARRIED MOTHERS AND THEIR CHILDREN	...	...	...	...	...	...	31
WELFARE FOODS AND VITAMINS	...	...	...	...	...	...	31
HEALTH CENTRES	...	...	...	...	...	...	31

PUBLIC HEALTH, NURSING AND ALLIED SERVICES :

HEALTH VISITING	...	...	...	...	...	...	32
MIDWIFERY	...	...	...	...	...	...	35
HOME NURSING	...	...	...	...	...	...	36
DOMESTIC HELP SERVICE	...	...	...	...	...	...	38
CHIROPODY SERVICE	...	...	...	...	...	...	40
AMBULANCE SERVICE	...	...	...	...	...	...	41

MENTAL HEALTH SERVICE :

GENERAL	...	...	...	...	...	...	46
SUBNORMALITY :	JUNIOR TRAINING CENTRE	...	...	...	...	...	46
	SALISBURY STREET HOSTEL	...	...	...	...	...	47
	ADULT TRAINING CENTRE	...	...	...	...	...	47
OTHER FORMS OF MENTAL DISORDER	...	...	...	...	...	...	48
GUARDIANSHIP	...	...	...	...	...	...	49



## COMMITTEES AT 31<sup>st</sup> DECEMBER, 1969

### *RELATED HEALTH SERVICES COMMITTEE*

The Mayor, Councillor R. G. CROCKER

Councillor E. J. NAYLOR (Chairman)

Councillor V. G. O'HARA (Deputy Chairman)

Alderman G. E. COOPER, J.P.

Councillor J. M. McINTYRE

Alderman J. PHEONIX, J.P.

Councillor E. MONKS

Alderman W. L. ROBERTS, J.P.

Councillor C. R. PROCTOR

Alderman J. SMITH

Councillor J. C. RICHARDSON, T.D.

Councillor W. AVERY, J.P.

Councillor P. T. H. TURTON

Councillor H. G. EDWARDS

Councillor Mrs. B. M. SHAKESHAFT

### *HEALTH COMMITTEE*

All the members of the Related Health Services Committee plus the following co-opted members :—

Dr. P. DARBY

Mr. J. RICHARDSON

Dr. P. O'BRIEN

Mrs. M. ROBERTSON, O.B.E., J.P.

### *MENTAL HEALTH SUB-COMMITTEE*

THE MAYOR

THE CHAIRMAN OF THE HEALTH COMMITTEE

THE DEPUTY CHAIRMAN OF THE HEALTH COMMITTEE

Alderman J. SMITH

Councillor Mrs. B. M. SHAKESHAFT

Councillor W. AVERY, J.P.

Dr. P. DARBY

Councillor H. G. EDWARDS

Dr. P. O'BRIEN

### *TOWN CLERK*

J. P. ASPDEN, Esq., LL.B.

## STAFF AT 31st DECEMBER, 1969

### WHOLE-TIME STAFF

*Medical Officer of Health*: ERIC H. MOORE, B.Sc., M.B., Ch.B., M.R.C.S., L.R.C.P., D.P.H., F.R.S.H.

*Deputy Medical Officer of Health*:

ANGELA MANNING, M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.P.H.

*Assistant Medical Officers of Health*:

MARY GRAHAM, M.B., Ch.B., D.P.H.

MARGARET L. TAYLOR, M.B., Ch.B. (part-time).

W. P. POVEY, M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.Obst., R.C.O.G.

*Principal Dental Officer*: A. P. FINLAY, L.D.S., R.F.P.S. (Glasg.)

*Dental Officers*:

Mrs. P. LAWTON, L.D.S., V.U.(Manc.).

C. H. TAYLOR, B.D.S. (part-time).

L. K. GRAY, L.D.S.

*Orthodontist*: Miss J. P. MURRAY, B.D.S., (U. L'pool) L.D.S., R.C.S. (Eng.), D.D.O., R.F.P.S. (Glasg.) (part-time).

*Dental Auxiliary*: Miss S. E. VERITY.

*Chief Public Health Inspector*: E. W. WARD, M.A.P.H.I., M.R.S.H.

*Deputy Chief Public Health Inspector*: N. A. BUCKLEY, M.A.P.H.I., M.R.S.H.

*Superintendent Nursing Officer*: Miss A. N. AGAR, S.R.N., S.C.M., Health Visitor's Cert.

*Lay Administrative Officer*: A. M. WILBOURN, D.M.A.

*Senior Mental Welfare Officer*: A. E. JESSOP M.S.M.W.O.

*Domestic Help Organiser*: Mrs. M. ADAMS

*Ambulance Officer*: W. H. BELL, F.I.A.O.

*Senior Chiropodist*: J. C. NEWTON, M.Ch.S., S.R.Ch.

*Speech Therapist*: Vacant

*Educational Psychologist*: Mrs. E. J. LONG, B.A., A.B.Ps.S.

### PART-TIME STAFF

*Consultant Obstetrician*: Mr. G. W. H. MILLINGTON, M.B., Ch.B., M.R.C.O.G.

*Visiting Medical Officer (Ear, Nose and Throat Clinic)*: P. O'BRIEN, M.D.

*Public Analyst*: J. D. SHERRATT, B.Sc., F.R.I.C.



*To the Mayor, Aldermen and Councillors of the  
County Borough of Warrington.*

MR. MAYOR, LADIES AND GENTLEMEN,

I have the honour to present my Annual Report on the state of the health of the town for the year 1969, and on the work carried out by the combined Health and Welfare Department.

The vital statistics reflected the improved state of health which, no doubt, results from the continually improving services provided, not only by the Local Authority, but by many other bodies both statutory and voluntary. It will be noted that the number of births continues to fall, as does the total population, largely due to migration just across the borough boundaries and, very largely, due to the building of Corporation houses outside the borough. The diminishing population is making it more difficult to provide services for those who remain since, inevitably, it tends to be the older age groups who are left behind who have more need of supportive services, resulting in an increased demand for services at a higher cost per thousand population compared with other towns. There is a great need for extension of the area in which the services are provided so that the services may be economically expanded. It will be noted also that the death rate continues to rise, reflecting the increase in the number of elderly persons within the area. Bearing in mind the social circumstances of the town, the Warrington statistics as compared with England and Wales are quite favourable, but great concern must be felt at the high incidence of deaths from cancer of the lung and bronchus, which I have mentioned in my previous reports as largely preventable.

The immunisation figures continue to be disappointing but show some improvement. Plans are in hand for a special drive to be made and maintained to try to bring this level to as near 100% protection as possible. The continued absence of the major infectious diseases has lulled parents into a false confidence and the immunisation rate of the town is such that the populace would form a suitable base for an outbreak of such diseases as diphtheria once introduced into the community.

The Ambulance Service had a particularly difficult year, largely due to the increasing age of the vehicles and the difficulties in maintenance. Delays occurred in the delivery of new vehicles and many spare parts were very difficult to obtain. The performance of some new vehicles when delivered has been most disappointing, two of them spending a long time in the Agent's hands owing to major mechanical faults. The maintenance responsibility was transferred to the Transport Department, who are meeting the same problem of the difficulty of obtaining spare parts for even relatively new vehicles. I cannot praise too highly the efforts made by the staff to maintain the service with a remarkably small number of vehicles on the road.

The Domestic Help Service continued to render invaluable help to many people but, very often, the amount of help given is short of what is really desirable and, while an increase in establishment has been granted by the authority, recruitment difficulties are being met in this as in many other parts of the service. There is a limit to the expansion which can take place as there are only a limited number of people willing and suitable to undertake the particular type of work.



The Welfare Service continued to suffer from the failure to recruit qualified Social Welfare staff but, with one Social Welfare Officer and two Assistants in post, there was further expansion of the development and functions.

The three Hostels in Warrington were approaching full capacity at the end of the year, but there was a notable reluctance from applicants for care to go to "The Chestnuts" at Lymm. Good working relations with the Consultant Geriatrician at the General Hospital and with the Psycho-Geriatric side of Winwick Hospital have assisted in the interchange of patients requiring different types of care.

The work of the Handicraft Class was somewhat expanded and this will be greatly helped by the delivery in 1970 of a vehicle suitable for carrying wheelchairs.

The Workshops for the Handicapped in Richmond Avenue continued to function in a most satisfactory manner and are now operating at their maximum capacity, having regard to the limitation of space and the number of workers who are employed. There is an urgent need for the provision of more satisfactory accommodation, both for the sake of the workers themselves and in order to expand the work. Informal approaches have been made to Lancashire County Council to see if there is any possibility of some form of joint venture in this field.

Temporary accommodation for the homeless continued to be a major problem and occupied a considerable amount of staff time. One house is available for temporary accommodation but it is extremely difficult once it is occupied to secure its vacation. The major problem arises from families who are evicted from property for non-payment of rent. Once such people enter the temporary accommodation they are difficult to move onwards since they are not tenants who are welcome by any landlord. The lack of availability of Social Workers for this work makes any attempts at rehabilitation impossible.

The very detailed report prepared by the Chief Public Health Inspector describes the efforts which are being made by the Department to improve the standards of food hygiene in the town, and gives details of courses which have been run at a Technical College by members of the staff of the Department for members of the public who are engaged in the Food Trades. A systematic education of food handlers should result in a much higher standard of food hygiene and of better personal practices in food premises. While food hygiene is largely dependent upon adequate premises properly equipped and maintained all such measures can be defeated by careless handling by a worker. Another development in food hygiene during the year has been visits of the Licensing Magistrates to Licensed premises accompanied by a Public Health Inspector. By this means it is hoped to improve the standards of hygiene of many Public Houses. Many of these premises were not adapted for providing food and, with an increasing trade in food, it is essential that the standards of food hygiene should be those which are found in other catering premises.

In the section on housing the problems of co-ordinating slum clearance with new house building are described. It is essential to co-ordinate the Clearance Programme with new house building so that there should not be undue delay in the re-housing of families after a house is condemned.

Unfortunately, problems have arisen in this regard owing to the uncertain handing over of new houses to the Corporation.

The report contains much detail of the work done in connection with Clean Air, and it is gratifying that the Smoke Control Programme is approaching completion. It is hoped that the temporary shortage of smokeless fuels will not be allowed to interfere with the completion of this programme, since it is essential to keep the "team" which has been built up in operation as this "team" comprises, not only the members of the Corporation staff responsible for the programme, but also Building Contractors, Heating Engineers, together with the Gas and Electricity Boards, who undertake conversions.

Relations with other Departments have continued to be good, and the co-operation between the various Departments, the Health Department and outside Bodies has been extremely satisfactory. The relationships within the medical services continue excellent and the problems that arise are not those of personality. Recruitment of staff generally is difficult, but one can see useful developments taking place in the services year by year. The main developments in recent years have, of course, been in the Welfare Services, in which much more development is still needed. The interest and support of the Chairman and Members of the Committee has been a great encouragement to all members of the staff, and I am personally very grateful to them for their understanding of the problems and their unfailing support in trying to overcome them.

I have the honour to be,

Your obedient servant,

ERIC H. MOORE,

Medical Officer of Health.



# GENERAL PUBLIC HEALTH SERVICES

## General Information

Average height above sea-level :								50 feet.
Area of County Borough in acres	...	...	...	...				4,639
Number of private dwellings (1961)	...	...	...	...				24,425
Number of private households (1961)		...	...	...				24,007
Rateable value, at 1st April, 1968	...	...	...	...				£3,219,390
Rateable value, at 1st April, 1969	...	...	...	...				£3,263,871
Actual product of a penny rate :—								
1968-69	...	...	...	...	...	...	...	£13,082
1969-70	...	...	...	...	...	...	...	£13,291
Population :—								
Census figure, (1961)	...	...	...	...	...	...	...	75,533
							1969	1968
Registrar-General's Estimates of Popu- lation at June 30th	...	...	...				*70,870	*71,380

\*These figures are " Home population figures " (i.e., they include members of the Armed Forces stationed in Warrington).

## Summary of Vital Statistics

Live Births—						1969	1968
Legitimate :	Males	....	....	....	508	} 1058	562
	Females	....	....	....	550		516
Illegitimate :	Males	....	....	....	59	} 123	67
	Females	....	....	....	64		63
Totals						1181	1208
Live Birth Rate per 1,000 Population						16.70	16.80
Corrected Live Birth Rate per 1,000 population						17.54	17.64
Illegitimate live births—percentage of total live births						10.42	10.76
Still Births—							
Legitimate :	Males	....	....	....	6	} 9	9
	Females	....	....	....	3		10
Illegitimate :	Males	....	....	....	3	} 5	—
	Females	....	....	....	2		2
Totals						14	21
Still-birth Rate per 1,000 live and still-births...						12.00	17.00
Still-birth Rate per 1,000 population						0.20	0.29
Total live and still-births						1195	1229
Infant Mortality (Deaths of infants under one year of age) :							
Legitimate :	Males	....	....	....	15	} 22	12
	Females	....	....	....	7		16
Illegitimate :	Males	....	....	....	3	} 4	2
	Females	....	....	....	1		1
Totals						26	31
Infant Mortality Rate per 1,000 live births—total						22.02	25.66
Infant Mortality Rate per 1,000 legitimate live births						20.80	26.90
Infant Mortality Rate per 1,000 illegitimate live births						32.52	30.76
Neo-Natal Deaths (Deaths of infants in first 28 days of life)						18	26
Neo-Natal Mortality Rate						15.24	21.52
Early Neo- Natal Mortality Rate (deaths of infants in first week of life per 1,000 live births)						13.55	19.04
Perinatal Mortality Rate (Still-births plus deaths in first week of life per 1,000 live and still-births)						25.10	35.80
Total loss of infant life (Still-births plus infant deaths) per 1,000 live and still-births						33.47	42.31
Maternal Deaths (including abortion)						—	1
Maternal Mortality Rate per 1,000 live and still-births						—	0.81



	1969	1968
Deaths .....	969	957
Death Rate per 1,000 home population ....	13.67	13.30
Corrected Death Rate per 1,000 population	16.27	15.69
Deaths from Bronchitis per 1,000 home population .....	1.23	0.97
Deaths from Pneumonia per 1,000 home population .....	0.69	0.64
Deaths from Cancer of lung and bronchus per 1,000 home population .....	0.76	0.60
Deaths from other forms of Cancer per 1,000 home population .....	1.81	1.96
Marriages .....	670	658
Marriage Rate per 1,000 population .....	9.45	9.22

## Vital Statistics

1950-1969

Year	Per 1,000 Population		Per 1,000 Live Births		Per 1,000 Total (Live and Still) Births	
	Death Rate	Live Birth Rate	Infant Mortality Rate	Neo-Natal Death Rate	Still Birth Rate	Still Births and Infant Deaths
1950	11.9	18.4	38.9	18.4	23.3	61.3
1951	12.07	17.3	38.10	25.9	32.6	69.5
1952	10.59	16.63	35.26	20.26	23.44	57.88
1953	10.38	17.31	24.47	15.83	27.31	49.72
1954	11.62	16.63	36.06	27.79	24.19	61.72
1955	11.74	16.59	28.70	16.61	26.47	54.41
1956	11.23	16.49	37.31	25.89	17.95	54.75
1957	11.53	17.70	30.58	16.35	23.61	53.62
1958	11.17	16.51	24.39	16.01	31.02	54.65
1959	11.23	16.18	31.98	22.62	22.12	53.39
1960	11.90	16.29	23.84	16.92	24.75	48.01
1961	13.62	17.08	38.61	27.03	23.34	61.09
1962	12.12	19.09	22.68	15.12	17.55	39.83
1963	13.32	18.89	28.57	21.60	15.77	43.89
1964	12.17	19.94	32.04	23.36	18.35	49.80
1965	12.13	19.17	16.05	10.46	20.46	38.15
1966	13.19	18.81	31.45	15.46	16.16	47.08
1967	13.13	17.97	24.70	16.56	13.00	40.86
1968	13.30	16.80	25.66	21.52	17.00	42.31
1969	13.67	16.70	22.02	15.24	12.00	33.47

## Comparative Statistics, 1969

	Warrington	England and Wales
<i>Rates per 1,000 Home Population :</i>		
Live births ... ..	16·7	16·3
Deaths (all causes) ... ..	13·7	11·9
Respiratory tuberculosis ... ..	0·04	0·02
Cancer of lung and bronchus ... ..	0·76	0·60
<i>Rates per 1,000 live and still births :</i>		
Still births ... ..	12·00	13·00
Maternal mortality ... ..	0·00	0·19
<i>Rates per 1,000 live births :</i>		
Infant mortality—deaths of infants under 1 year ... ..	22·02	18·0
Neo-natal mortality—deaths of infants in first 28 days of life ... ..	15·24	12·0

Causes of Death at different Periods of Life in the County Borough of Warrington

CAUSE OF DEATH	AGE GROUP AND SEX																							
	Under 4 weeks		4 Wks. & under 1 year		1 to 5 years		5 to 15 years		15 to 25 years		25 to 35 years		35 to 45 years		45 to 55 years		55 to 65 years		65 to 75 years		75 years and over		Totals	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Enteritis and other Diarrhoeal disease	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
Tuberculosis of Respiratory system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-
Other tuberculosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Infective and parasitic disease	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
Malignant neoplasm: Buccal cavity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Malignant neoplasm: Oesophagus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-
Malignant neoplasm: Stomach	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	-
Malignant neoplasm: Intestine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	-
Malignant neoplasm: Larynx	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10	-
Malignant neoplasm: Lung and Bronchus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-
Malignant neoplasm: Breast	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	47	-
Malignant neoplasm: Uterus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18
Malignant neoplasm: Prostate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
Leukaemia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Other malignant neoplasms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Benign and unspecified neoplasms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8
Diabetes mellitus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27
Other Endocrine, etc. diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Anaemias	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
Meningitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Other diseases of nervous system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Chronic Rheumatic Heart disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Hypertensive disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Ischaemic Heart disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5
Other forms of Heart disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
Cerebrovascular disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15
Other diseases of Circulatory system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96
Influenza	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20
Pneumonia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
Bronchitis and Emphysema	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36
Other diseases of Respiratory system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	154
Peptic Ulcer	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
Intestinal Obstruction and Hernia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21
Cirrhosis of Liver	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41
Other diseases of digestive system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19
Nephritis and Nephrosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14
Hyperplasia of Prostate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21
Other diseases, genito-urinary system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	31
Diseases of musculo-skeletal system	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28
Congenital Anomalies	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Birth injury, difficult labour, etc.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Other causes of Perinatal mortality	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25
Symptoms and ill-defined conditions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
Motor vehicle accidents	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13
All other accidents	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9
Suicide and self-inflicted injuries	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26
All other external causes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7
TOTAL ALL CAUSES	13	5	3	3	2	3	-	-	5	-	6	3	17	5	54	24	118	54	176	122	143	208	543	426



## PRINCIPAL CAUSES OF DEATH IN ORDER OF FREQUENCY

Out of 969 deaths occurring during the year 869 were attributable to the undermentioned principal causes :—

	No. of Deaths	Percentage of Deaths from all causes
1. Heart Diseases ....	324	33.44
2. Cancer ....	182	18.78
3. Cerebrovascular disease ....	113	11.69
4. Bronchitis ....	87	8.98
5. Other Circulatory Diseases ....	60	6.50
6. Other defined and ill-defined causes ....	54	5.57
7. Pneumonia ....	49	5.05

## INFANT DEATHS (Under 1 year)

Principal certified Causes of Death	Age at Death									Total
	Under 24 hours	Days				Months				
		1-7	8-14	15-21	22-28	1-3	3-6	6-9	9-12	
Prematurity .....	4	1	—	—	—	—	—	—	—	5
Congenital Malformations .....	1	2	—	1	—	3	—	—	—	7
Respiratory Infection .....	2	3	—	—	—	—	1	—	—	6
Cerebral Haemorrhage .....	—	3	1	—	1	—	—	—	—	5
Meningitis .....	—	—	—	—	—	—	—	1	—	1
Gastro-Enteritis .....	—	—	—	—	—	1	—	—	—	1
Asphyxia .....	—	—	—	—	—	1	—	—	—	1
TOTALS .....	7	9	1	1	1	5	1	1	—	26

## INFANT MORTALITY

The infant mortality rate fell from 25.66 in 1968 to 22.02 in 1969.

Of the 26 infant deaths 16 occurred in the first 7 days of life, of which 1 was delivered at home. This baby died in hospital and the cause of death was :

Cerebral Haemorrhage.

# CONTROL OF COMMUNICABLE DISEASES

## Notifications received during 1969

(Corrected Notifications)

Disease	Age Groups of Cases Notified									Total
	Under 1	1- 2	3- 4	5- 9	10- 14	15- 24	25- 44	45- 64	65 & over	
Measles .....	3	3	1	4	—	—	—	—	—	11
Scarlet Fever .....	—	2	4	8	1	1	—	—	—	16
Acute Meningitis .....	—	—	—	—	—	1	—	—	—	1
Puerperal Pyrexia .....	—	—	—	—	—	—	—	—	—	—
Infective Jaundice .....	—	4	5	32	13	8	8	—	3	73
Tuberculosis (Resp.) :										
Males .....	—	—	—	—	—	1	2	4	—	7
Females .....	—	—	—	—	—	1	—	1	—	2
Tuberculosis (Non-Resp.) :										
Males .....	—	1	—	—	—	—	—	—	—	1
Females .....	—	—	—	—	—	—	—	1	—	1
Salmonella Enteritis .....	—	—	—	—	—	—	—	—	1	1
Erysipelas .....	—	—	—	—	—	—	—	—	—	—
Dysentery .....	—	11	4	9	2	5	6	—	—	37
TOTALS .....	3	21	14	53	16	17	16	6	4	150

## Venereal Diseases

The following figures are compiled from information received from a number of clinics, including those held in Warrington.

Number of patients resident in Warrington and treated for the first time during the year :—

			1969	1968	1967
Gonorrhoea	...	...	39	70	30
Syphilis	...	...	3	6	—
Other Conditions	...	...	75	238	77

## Tuberculosis

The weekly mass-radiography session held at the General Hospital on Tuesday afternoons continues to be appreciated by the medical profession and the public.

The arrangements for the prevention of tuberculosis and its after-care have followed the same lines as previously.



## DOMICILIARY VISITING

Regular visiting of all households from which notifications have been received is accompanied by intensive efforts to trace all contacts with a known case of respiratory tuberculosis.

Details of domiciliary visiting by Health Visitors are given below :—

(a)	In connection with newly-notified cases :					
(1)	To patients notified for first time	....	....	....	....	9
(2)	To contacts with new cases	....	....	....	....	19
(3)	No access visits	....	....	....	....	2
(b)	In connection with cases previously notified :					
(1)	To patients	....	....	....	....	8
(2)	To contacts with old cases	....	....	....	....	15
(3)	No access visits	....	....	....	....	6
(c)	Special visits	....	....	....	....	52
TOTAL VISITS						111

## B.C.G. VACCINATION

During the year B.C.G. inoculation of school children in the thirteen-year-old age group was carried out.

Number of children mantoux-tested	....	....	993
Number found negative	....	....	938
Number vaccinated with B.C.G.	....	....	938

## INCIDENCE AND DEATH RATES PER 1,000 POPULATION

Year	Notifications		Death Rate		
	Respiratory	Non-Respiratory	Respiratory	Non-Respiratory	All Forms
1950	0.67	0.09	0.28	0.05	0.33
1951	0.84	0.19	0.27	0.12	0.40
1952	0.93	0.02	0.17	0.05	0.22
1953	1.05	0.07	0.14	0.01	0.15
1954	0.89	0.07	0.15	0.01	0.17
1955	0.78	0.09	0.11	0.01	0.11
1956	1.09	0.12	0.10	0.01	0.11
1957	0.62	0.10	0.03	0.01	0.05
1958	0.88	0.06	0.07	0.01	0.09
1959	0.52	0.01	0.08	0.00	0.08
1960	0.28	0.00	0.07	0.00	0.07
1961	0.45	0.02	0.13	0.00	0.13
1962	0.28	0.02	0.14	0.02	0.17
1963	0.29	0.02	0.14	0.01	0.16
1964	0.20	0.02	0.04	0.01	0.05
1965	0.13	0.08	0.04	0.00	0.04
1966	0.16	0.01	0.07	0.00	0.07
1967	0.08	0.01	0.04	0.01	0.05
1968	0.09	0.00	0.04	0.00	0.04
1969	0.17	0.03	0.04	0.03	0.07

DEATHS

There were 3 deaths from respiratory tuberculosis during the year and 2 deaths attributable to non-respiratory tuberculosis.

The table of causes of death on page 16 gives the analysis by age and sex of those dying of respiratory tuberculosis.

Prophylactic Measures

Immunisation is carried out at the Child Health Centres, and at schools, and also by general practitioners by arrangement with the Authority.

The table below gives details of initial protection given by the injection of prophylactics against diphtheria, smallpox, whooping cough, poliomyelitis, tetanus and measles.

Disease against which protection given	No. of primary courses performed							Performed by Local Health Authority	Performed by General Practitioner
	Born 1969	Born 1968	Born 1967	Born 1966	Born 1962-1965	Others under Age 16	Total		
Diphtheria ....	41	593	93	30	234	48	1039	851	188
Whooping Cough ...	39	584	88	30	77	8	826	638	188
Tetanus....	41	593	93	30	234	57	1048	860	188
Poliomyelitis ....	37	602	90	31	217	89	1066	879	187
Measles ....	-	52	109	52	66	1	280	212	68

Smallpox ....	Under 1	1 year	2 to 4 Years	5 to 15 Years	Total	Performed by Local H.A.	Performed by G.P's.
	34	352	62	9	457	308	149

RE-INFORCEMENT MEASURES

In addition to the above measures of primary protection the following numbers were given re-inforcement doses :

	By Local Health Authority	By General Practitioners	Total
Diphtheria ....	1424	74	1498
Re-vaccination (Smallpox) ....	13	28	41
Poliomyelitis ....	1514	67	1581
Tetanus ....	1908	106	2014
Whooping Cough ....	2	29	31

The figures show, for primary courses given, a slight improvement although, due to a long period during which vaccine was unobtainable, the number of measles given is only minimal.

Numbers of reinforcement doses show increases in all but Whooping Cough.

It is hoped that the increase in primary courses will be carried over into successive years.



## NATIONAL ASSISTANCE ACT, 1948 and 1951

The progress noted in my report for the year 1968 was fully maintained during 1969. The Welfare Services Section continued to suffer from the failure to recruit qualified Social Welfare Staff, but with one social welfare officer and two welfare assistants in post at the beginning of the year there was further extension and development of the Welfare functions of the Department.

One Welfare Assistant resigned in mid-1969 to take up another appointment but was quickly replaced and throughout the year the Welfare Assistants have been deployed in extending the regular visiting of aged and physically handicapped persons and developing the 'preventive' aspects of the services provided by the Welfare Section.

### *RESIDENTIAL ACCOMMODATION*

With the three new 52-place purpose built Hostels fully available during 1969, the position with regard to the provision of residential accommodation was more satisfactory than it has ever been. Because the very high standards of accommodation provided at these Homes have now become widely known there is much less reluctance on the part of old people who are in need of care and attention to seek admission and whilst vacancies were immediately available for all who needed admission, by the end of the year it was becoming necessary to begin once again to compile a "waiting list" and to arrange admissions with some regard to urgency of the need. Another very satisfactory feature of the year's working was that it became possible to accept promptly cases referred by the Consultant Geriatrician, who had been temporarily admitted to hospital but who, whilst they had recovered, were not considered well enough to return to live in their own homes. In addition it was also possible to accommodate for short-stay periods considerably greater numbers of old people who were admitted temporarily to the new Homes whilst relatives who normally looked after them were on holiday or during other temporary periods of domestic difficulty.

Towards the end of the year, "The Chestnuts," Lymm, began to be used for this purpose also whilst by arrangement with the Cheshire County Council it was possible to admit a number of cases from Cheshire who might otherwise have been required to wait for places to become available in Homes provided by the Cheshire Authority. Notwithstanding this, however, because there is still some reluctance on the part of applicants from the County Borough area to accept admission to "The Chestnuts," at the end of the year there were still several vacancies at this Home.

### *TEMPORARY ACCOMMODATION*

During 1969, there was no significant change in the matter of the provision of temporary accommodation for families who became homeless. The Authority continued to make available one small terraced dwelling house in which it is possible to accommodate two families in emergency. For the greater part of the year the same two families remained in this accommodation but had not been themselves successful in obtaining any alternative accommodation. Eventually in December, 1969, it became possible through the co-operation of the Children's Officer to arrange for

one mother and her three children to be transferred to the care of the Children's Committee for a period of rehabilitation and the second family who had been given notice to vacate the accommodation finally succeeded in re-establishing themselves in private housing. Whilst it is still considered that the provision of two units of temporary housing is adequate for the genuine needs of the homeless, this provision will not meet the actual need for this until some arrangements can be made to provide intermediate accommodation into which homeless families can be moved promptly so that they do not remain in the temporary accommodation for prolonged periods. As previously indicated, it is also considered that additional Social Workers will be required to deal with the manifold problems inherent in the proper rehabilitation of these families.

**Welfare Arrangements for Handicapped Persons**

*BLIND PERSONS*

The functions of the Authority in respect of the Welfare of the Blind continued during the year to be administered partly directly by the Health and Welfare Department and partly by the Warrington, Widnes and District Society for the Blind as Agents of the Authority. Normally two Home Teachers of the Blind are employed directly by the Authority to work closely with the Society but the resignation of one of these Home Teachers, a blind man, with a record of many years' service, was received during the year, and whilst a replacement appointment was made, by the end of the year this post was again vacant. Despite difficulties caused by this vacancy services were satisfactorily maintained largely through the efforts of the remaining Officers and the close collaboration of voluntary workers.

The workshops for Handicapped Persons at Richmond Avenue, Warrington continued to provide employment for 16 male and 5 female blind employees with 2 male and 2 female physically handicapped workers, and the improvements anticipated in my report for 1968, were fully realised. By the end of 1969, the workshops were operating to maximum capacity having regard to limitations of space and to the number of workers employed and the financial position of the workshops continued to show very satisfactory progress.

*BLIND and PARTIALLY-SIGHTED PERSONS*

*1. Numbers on the Register*

	BLIND			PARTIALLY SIGHTED		
	Male	Female	Total	Male	Female	Total
Numbers on register at 1.1.69 ... ..	70	72	142	28	44	72
Numbers added to register during year	12	24	36	4	6	10
Numbers on register at 31.12.69 ... ..	73	89	162	25	34	59



## 2. FOLLOW-UP OF REGISTERED BLIND AND PARTIALLY-SIGHTED PERSONS YEAR ENDED 31. 12. 69

	Cause of disability			
	Cataract	Glaucoma	Retrolental Fibroplasia	Others
No. of cases registered during the year in respect of which para. 7(c) of Form B.D. 8 recommended :				
(a) No treatment :				
Blind Persons ...	12	3	—	17
Partially-sighted persons ...	3	—	—	4
(b) Treatment (medical, surgical or optical):				
Blind persons ...	2	1	—	1
Partially-sighted persons ...	2	—	—	1
Number of cases at (b) above, which on follow-up action, had received treatment : Blind Persons	2	1	—	1

During the year no case of retrolental fibroplasia among premature infants was notified.

### DEAF PERSONS

The local authority's functions in regard to the welfare of the deaf are exercised by the Warrington and District Society for the Deaf. The number of cases at the 31st December was as follows:

Deaf	....	....	....	....	....	....	....	53
Hard of Hearing	....	....	....	....	....	....	....	142

### HANDICAPPED PERSONS (General Classes)

During 1969 a very high level of activity was maintained in the Social/Handicraft Centre for Physically Handicapped Persons and the Handicraft Instructress and her two part-time Assistants were fully occupied with the additional work arising from extra sessions at the Centre and greatly increased activities in the three new Homes for Aged Persons.

Output of finished goods was considerably increased and the quality of these goods was consistently high. As a result the Annual Exhibition and Sale of Work which was held again in November was particularly successful, and did much to publicise this particular aspect of the work of the Department. By the end of 1969 a total of 257 persons were included in the Register of General Classes of Handicapped.



As envisaged in my report for 1968 further expansion of the services for handicapped persons and in the provision of day care for elderly persons depends largely on the availability of a specialised vehicle in which disabled persons and particularly those in wheel-chairs can be transported. In this connection it is pleasing to note that by the end of 1969 approval had been given to the purchase of one such special vehicle and it is hoped that this will become available during 1970.

### *ADAPTATIONS*

Alterations designed to assist handicapped persons in their own homes were carried out in 4 cases during the year.

### *SECTION 47*

#### *REMOVAL OF PERSONS IN NEED OF CARE AND PROTECTION*

No Action was taken under this Section during the year.

### *SECTION 50*

#### *BURIAL OF THE DEAD*

Arrangements were made in one case during the year since there was no other person or organisation able or willing to accept responsibility for burial.

### *CHIROPODY SERVICE*

Chiropody for the physically handicapped and for the aged is provided at three Clinics for those persons able to travel either by public transport or by ambulance. In the case of the housebound there is an arrangement whereby the Council of Social Service provide a Domiciliary Chiropodist, in recognition of which the authority pay an Annual Grant to the Council of Social Service which covers chiropody and other services rendered by that body.

### *MEALS ON WHEELS*

Throughout the year the Meals on Wheels Service continued to operate at maximum capacity with the meals for the service being provided largely from the kitchens of the three new Homes for Aged Persons with the beneficial results mentioned in my 1968 report. At the same time, however, a most useful contribution to the service continued to be made by the supply of 120 meals per week from the canteen of a local industrial concern, and acknowledgement must be paid to the Company concerned for their willingness to continue to assist in this way. I would also wish to express appreciation for the continued voluntary help readily provided by members of the Women's Royal Voluntary Service and the team of helpers associated with the Warrington and District Council of Social Service who generously gave of their time and energy to make the distribution of the meals on wheels possible. Without this help it would be difficult to maintain the service at its present high level. A total of approximately 385 meals per week were delivered throughout the year.

## *LUNCHEON CLUB*

During the year discussions took place with a voluntary body with a view to establishing a Luncheon Club for old people in the centre of the town and, at the time of writing this report, agreement had been reached to establish such a Luncheon Club in the coming year. This should prove a useful service to many old people who do not need "Meals on Wheels" but who, nevertheless, require dietary assistance. It is hoped when this Club has been established that it will be possible to carry out further developments on a similar line in the Orford area, and then in other areas of the town.

## **GENERAL MEDICAL SERVICES**

During the year the medical staff of the Department carried out medical examinations on selected entrants to the Council's Service and on staff absent owing to illness to advise on their fitness to return to duty.

During 1969 180 medical examinations were carried out for the purpose of the Sickness Pay Scheme and 91 for other reasons.

# Notifications of Birth

The table below gives details of all births notified during the year occurring in the home, or in Institutions, and gives the total number of births finally attributable to Warrington after outward transfer of births attributable to other Authorities. This figure of attributable notified births does not necessarily coincide with the number of attributable registered births supplied by the Registrar-General.

	Domiciliary										Institutional										Totals													
	Live Births						Still Births		Total Births		Live Births						Still Births		Total Births		Live Births				Still Births		Total Births							
	Pre-mature		Mature		Total						Pre-mature		Mature		Total						Pre-mature		Mature		Total									
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F				
Births notified as occurring in Warrington ... ..	4	10	152	187	156	197					92	102	955	948	1047	1050					19	12	1066	1062	96	112	1107	1135	1203	1247	19	12	1222	1259
Births occurring outside Warrington attributable to Warrington (Inward transfers) ... ..	—	—	—	—	—	—					—	—	—	5	—	5					—	—	—	5	—	—	—	5	—	—	—	—	—	5
Total of all births notified ...	4	10	152	187	156	197					92	102	955	953	1047	1055					19	12	1066	1067	96	112	1107	1140	1203	1252	19	12	1222	1264
Births occurring in Warrington attributable to other Authorities (Outward Transfers) ... ..	—	—	—	—	—	—					58	55	576	573	634	628					13	8	647	636	58	55	576	573	634	628	13	8	647	636
Total births attributable to Warrington ... ..	4	10	152	187	156	197					34	47	379	380	413	427					6	4	419	431	38	57	531	567	569	624	6	4	575	628



# PERSONAL HEALTH SERVICES

## MATERNAL AND CHILD-CARE

### *GENERAL*

Maternal and Child Care Services are based on the Health and Education Clinic at the rear of the Health and Welfare Department, and at the Health Centre, Orford. These services are supported by two clinics, one of which is held in hired premises.

### *ANTE-NATAL AND POST-NATAL SERVICES*

Ante-natal clinics are held weekly at the three main clinics in the town. Each expectant mother is seen by a midwife, and in special cases they are referred to the Consultant Obstetrician who attends at Garven Place for a special session when required. Post-natal examinations are generally carried out by a general practitioner who is under contract to carry out these examinations.

Attendance at midwives' sessions	....	....	....	....	1354
Attendances at Consultant Obstetrician's sessions				....	—
Number of expectant mothers attending	....	....	....		270

### *RELAXATION CLASSES*

Relaxation classes are held weekly at Garven Place Clinic conducted by health visitors and midwives with the assistance of a part-time physiotherapist. The attendances were :

Number of expectant and nursing mothers attending	...	...	...	...	...	111
Total number of attendances made				...	...	674
Number of classes held	...	...	...	...		49

The total number of premature infants born in the area during 1969 was 95. The figure for 1968 was 84.

PREMATURE INFANTS BORN AT HOME TO WARRINGTON MOTHERS

Weight at Birth	Born at home and nursed entirely at home			Born at home and transferred to hospital on or before 28th day			Grand Total
	Total	Died within 24 hrs of birth	Sur- vived 28 days	Total	Died within 24 hrs of birth	Sur- vived 28 days	
2-lb. 3-ozs. or less	—	—	—	—	—	—	—
Over 2-lb. 3-oz. up to and including 3-lb. 4-oz.	—	—	—	—	—	—	—
Over 3-lb. 4-oz. up to and including 4-lb. 6-oz.	1	—	1	1	—	1	2
Over 4-lb. 6-oz. up to and including 4-lb. 15-oz. .	2	—	2	—	—	—	2
Over 4-lb. 15-oz. up to and including 5-lb. 8-oz.	9	—	9	1	—	1	10
TOTALS ... ..	12	—	12	2	—	2	14

10 premature infants died within 28 days, which is 10·53 per cent of the 95 premature infants born during 1969.

CHILD HEALTH

GENERAL

The four Child Health Centres continue to work satisfactorily, and the total attendances during the year rose from 9,795 in 1968 to 10,028 in 1969. The number of children who made the attendances fell to 2,220.

The Toddlers' Clinics, which provide a service similar to the School Health Service, continued to function throughout the year. The full range of specialist services are available, including the special clinics provided by the Education Service.



The Centres being operated at the end of the year were as follows :

13 Folly Lane, Bewsey.

Toddlers Clinic. Tuesday 10 a.m. to 12 noon. (By appointment).

Infant Clinic. Tuesday 2 p.m. to 4 p.m.

Central Clinic, Garven Place.

Toddlers' Clinic. Tuesday 2 p.m. to 4 p.m. (By appointment).

Infant Clinic. Wednesday 10 a.m. to 12 noon and 2 p.m. to 4 p.m.

Orford Health Centre.

Toddlers' Clinic. Thursday 10 a.m. to 11.30 a.m. (By appointment).

Infant Clinic. Monday 2 p.m. to 4 p.m.

Thursday 2 p.m. to 4 p.m.

Methodist Schoolroom, Latchford.

Infant Clinic. Friday 2 p.m. to 4 p.m.

### *CONGENITAL DEFECTS*

The arrangements continue whereby every congenital defect which is noticed at birth is notified to the Department. This is done by details of the defect being put on the birth notification card by the midwife who delivers the baby. This system ensures that every child who is notified as suffering from a congenital defect can be carefully kept under surveillance. During the year 22 congenital defects were reported.

The increase, previously noted, in the incidence of spina-bifida continues. Surgical procedures are now ensuring that more of these children survive than was formerly the case, but there are indications that there is an increase in the number of such children born. Shortly this will result in an increased requirement for the special education of physically handicapped children.

Details of the attendances at these Child Health Centres, and at the three Toddlers' Clinics are given below :

# I. CHILD HEALTH CENTRES

Name of Centre	No. of Child Health Sessions per month	No. of children who first attended and who at first attendance were under 1 year	Number of children who attended during year and who were born in :			Total number of children who attended during year	Number of attendances during the year who at the date of attendance were			Total attendances during the year
			1969	1968	1964-67		under 1 year	1 but under 2	2 & over but under 5	
*Central Clinic, Garven Place .	12	357	292	220	365	877	2903	643	318	3864
*Bewsey ...	8	124	96	60	202	358	1105	301	159	1565
*Orford ...	12	325	268	180	341	789	2719	531	281	3531
Latchford...	4	107	101	68	27	196	885	158	25	1068
TOTALS ...	36	913	757	528	935	2220	7612	1633	783	10028

\* Includes figures for Toddlers' Clinic, details of which are given separately.

2. TODDLERS' CLINICS

No. of Sessions held	No. of appointments made	No. of toddlers who attended	No. of revisits by toddlers	Total No. of attendances made	No. referred for treatment
146	1594	813	248	1061	29

3. CONSULTATIONS WITH MEDICAL OFFICER

Name of Centre					Under 1 year	1 to 5 years	Totals
Central Clinic, Garven Place	...	...	...	...	531	59	590
Bewsey	...	...	...	...	203	40	243
Orford	...	...	...	...	690	70	760
Latchford	...	...	...	...	199	23	222
TOTALS	...	...	...	...	1623	192	1815

DENTAL CARE

During the year, 422 children of pre-school age were dentally inspected, and 245 commenced treatment. The total attendances in the same period were 377.

The number of expectant and nursing mothers dentally inspected totalled 38 and the number of attendances made for treatment was 91.

General anaesthetics administered totalled 153.

The tables below give details of the work carried out during the year

	Examined	Commenced Treatment	Made Fit
Expectant and Nursing Mothers	38	37	36
Children under 5	422	245	164

	No. of fill-ings	Teeth fill-ed	Ex-trac-tions	Gen-eral Anaes-the-tics	Emer-gency visits by pati-ents	Pati-ents X-rayed	Prop-hyla-xis	Other-wise Con-served	Root Fill-ed	Cr'ns and Inlays
Expectant and Nursing Mothers	15	14	54	13	17	—	11	—	—	—
Children under 5	78	73	240	140	121	—	61	21	—	—
Supplied with F.U. or F.L. (First Time)		Supplied with other Dentures		No. of Dentures Supplied		General Anaesthetics				
6		4		14		153				



DAY NURSERIES

The Authority at the end of the year had one Day Nursery in operation providing accommodation for 50 children under the age of five years.

ADMISSIONS

Number of new applications for admission			Number of Children admitted		
Short term Cases	Social Cases	Other Cases	Short term Cases	Social Cases	Other Cases
4	62	—	4	54	—

ATTENDANCES MADE AT THE DAY NURSERY  
(MONDAY TO FRIDAY)

No. of attendances			No. of days open
0—2 years	2—5 years	Total	
1,780	8,083	9,863	252

The table below gives the number of places in the two age groups at the Day Nursery, and the average daily attendances during the year.

0 to 2 years		2 to 5 years		Total	
No. of places	Average daily attendance	No. of places	Average daily attendance	No. of places	Average daily attendance
14	7.06	36	32.08	50	39.14

Under the Nurseries and Child Minders Regulation Act, 1948, as amended by the Health Service and Public Health Act, 1968, the Authority has registered the following :

One private day nursery, two play groups and nine child minders.

CARE OF UNMARRIED MOTHERS AND THEIR CHILDREN

11 such cases were admitted to various homes during 1969 as compared with 16 in 1968. Close co-operation is maintained between the various homes to which the mothers are admitted and the Authority, in order to secure follow-up of the infants.

Included in the figure of visits paid by the Health Visitors during 1969 are 132 visits to illegitimate children under one year, and 77 to those over one year old.

Priority in the allocation of nursery accommodation is given to the children of unmarried mothers who go out to work.

WELFARE FOODS AND VITAMINS

National Dried Milk and vitamins were available at the Welfare Foods Shop each day, Monday to Saturday, at Child Health Centres during session, and at sessions of the Hospital Ante-natal Clinics. Figures are given below of the sales for 1968 and 1969 for comparison :

	1969	1968
National Dried Milk ....	7,845 tins	12,888 tins
Cod Liver Oil ....	1,016 bottles	1,053 bottles
Vitamins " A " and " D " ....	1,838 packets	1,318 packets
Orange Juice ....	16,431 bottles	14,864 bottles

HEALTH CENTRES

The Orford Health Centre continued to operate on the same lines as previously, providing Branch Surgery facilities for approximately 20 practitioners. Negotiations continued during the year concerning the financial arrangements and were unresolved at the time of writing this report. While this Centre does not fulfil the modern concept it is providing useful facilities for the densely populated Orford area. The only serious 'hitch' during its course of operation has been connected with the financial arrangements and the recent Department Circular concerning the arrangements for Health Centres has not really helped since it is intended for what is now the traditional type of Health Centre, not for one so unique in its form of operation as that at Orford. At the end of the year there were signs that the financial problems would be resolved, and this will be welcomed by all parties. The general practitioner patient attendances for the year, and in comparison with previous years, are as follows :

1964—April to March, 1965	....	....	....	....	15,897
1965—April to March, 1966	....	....	....	....	16,452
1966—April to March, 1967	....	....	....	....	14,160
1967—April to March, 1968	....	....	....	....	15,727
1968—April to March, 1969	....	....	....	....	14,664
1969—April to March, 1970	....	....	....	....	16,511

During the year discussions continued with the 8 practitioners concerned regarding the establishment of the new Health Centre at the junction of Bewsey Road and Tanners Lane. Discussions also took place informally with Officers of the Department of Health, which were very helpful in proceeding with the planning of this Unit, and it is hoped that it will be possible to start building work on this Centre in the year 1971/72, if loan sanction is forthcoming.



# PUBLIC HEALTH NURSING AND ALLIED SERVICES

## HEALTH VISITING

### *STAFF*

At the 1st January, 1969, the staff consisted of:—

- 1 Superintendent Nursing Officer.
- 1 Senior Health Visitor.
- 1 Whole-time Health Visitor (seconded to a General Practitioners' Group).
- 8 Health Visitor/School Nurses.
- 2 Clinic Nurses.
- 1 Student H.V. in training.

At the end of the year the staff position was:—

- 1 Superintendent Nursing Officer.
- 1 Senior Health Visitor.
- 1 Whole-time Health Visitor (seconded to a General Practitioners' Group).
- 8 Health Visitor/School Nurses (including 1 H.V. working in liaison in a group practice).
- 2 Student Health Visitors in training.
- 3 Clinic Nurses.

The year has not produced any radical change in the work of the Health Visitors. Due to shortage of staff, selective visiting has had to be increased. Every aspect of Health Visiting has been adequately covered.

Much more has been done in the field of Health Education, in particular the giving of group talks, discussions and parentcraft classes.

### *HEALTH VISITORS' DUTIES*

Ante-natal and Post-natal relaxation classes were held weekly at the ante-natal clinic. Film shows and group teaching have proved very successful.

Work continues with the young, unmarried mother, and in this field the Health Visitor is working with the Voluntary Services of the Church of all denominations, to try to establish closer relationships with the unmarried mother and her parents.

Problem families as ever still take up a large proportion of the Health Visitors' time, and much is done to prevent break-up of homes. Close contact is maintained with all departments of both Voluntary and Statutory organisations in efforts to help families as units.

The Health Visitors continue to attend the Chest Clinic at the local hospital on a rota system, thereby keeping a close liaison between hospital and domiciliary work relating to tuberculosis. Tine tests and readings are carried out for the Chest Physician on all contacts of tuberculosis under the age of 15 years.

One Health Visitor attends fortnightly at the Special Clinic for follow-up visits and reports, at the request of the Venereologist.



The Guthrie test for Phenylketonuria replaced the Phenistex Test as from the 1st April.

Student nurses from the 3 local hospitals spent one day with the Health Visitor for a brief resume of domiciliary work.

Routine visiting of all children under 5 years was carried out. Visits to all notifications of Infectious diseases were made, and advice on care and after-care in these cases was given.

Sweep tests of hearing of selected children under five years were carried out and as necessary referred through the Assistant Medical Officer of Health to the Consultant Ear, Nose and Throat Surgeon, who attends the Central Clinic on a sessional basis.

Continuing effort is made to establish closer relationship with General Practitioners. Individual approach is made to the General Practitioners by the Health Visitors and vice-versa and efforts are made to arrange attachments when requested by the Practitioners. One health visitor is attached whole-time to a group practice and one part-time to another group.

SUMMARY OF WORK OF HEALTH VISITORS

1. Visits to Mothers and Young Children

Number of children under 5 years of age visited during year	Expectant mothers		Children under 1 year of age		Children age 1 and under 2 years	Children age 2 and over but under 5 years
	First visits	Total visits	First visits	Total visits	Total visits	Total visits
4,547	248	321	1120	3810	2312	3494

2. Other Visits

For purposes of After-care :	first visits	....	....	....	56
	subsequent visits	....	....	....	34
To the aged and infirm :	first visits	....	....	....	127
	subsequent visits	....	....	....	145
To cases of notifiable disease....	....	....	....	....	77
To contacts with cases of V.D.	....	....	....	....	5
Special visits	....	....	....	....	685
TOTAL	....	....	....	....	1129

3. Attendances at Clinics and Centres

No. of attendances at Child Health Centre Sessions	....	759
No. of attendances at Ante-natal and post-natal clinic sessions	....	90
No. of attendances at Hospital Out-Patient Clinics for purpose of liaison :		
To V.D. Clinic	....	14

HEALTH EDUCATION

Health Education has been carried out during 1969 in much the same way as in previous years. Posters are used, although the value of this media as a means of communication is becoming less and less as the pressure from advertising generally increases over the years.

The basic work is mostly carried out by personal contact in the home and at the Clinics, or by means of lectures to various organisations by members of the Department.

## MIDWIFERY

### STAFF

At the 1st January, 1969, the staff consisted of :—

1 Superintendent Nursing Officer.

9 Midwives employed by the Local Authority.

### ORGANISATION AND DUTY ARRANGEMENTS

The town is divided into two areas, No. 1 District—4 midwives, No. 2 District—5 midwives, each area providing relief for off-duty and holidays.

7 Midwives receive casual-user car allowance, and 2 use auto-cycles. The Ambulance Service provides transport where necessary to convey the midwife and her equipment to night cases.

Midwives operate their own ante-natal clinics at three of the Local Authority Clinics. They also attend and instruct at the Relaxation and preparation of child-birth classes at the Central Clinic in conjunction with Health Visitors. The Cervical Cytology Clinic is attended by the Midwives on a monthly rota.

2 midwives attended a 1-week Refresher Course during the year, and all midwives attended an afternoon conference.

### TRAINING

There are 6 teaching midwives on the Local Authority Staff.

The Warrington General Hospital is an approved training school for Part II.

### MATERNITY CASES ATTENDED

There were 355 domiciliary confinements reported and 843 institutional confinements during the year.

Midwives employed by the Authority attended 347 cases (in each case attended a doctor had been booked).

It will be noted that the number of domiciliary confinements has fallen considerably in the last 3/4 years. Until that time there were between 700 and 800 domiciliary confinements a year, but, with the development of 48-hour discharge from hospital, there has been a marked drop in home confinements with a consequent increase in institutional ones. Early discharge from hospital has resulted in midwives undertaking more post-natal nursing and the reduction in confinement does not represent a true reduction in work of the service since many of the women who are confined in hospital must subsequently receive the care of the domiciliary midwife on discharge. As previously indicated the number of midwifery staff has been reduced by one.

### MEDICAL AID

Medical aid was summoned by midwives in 67 domiciliary cases in each of which the medical practitioner had arranged to provide the patient with maternity medical services under the National Health Service Act. In one other case the doctor called had not done so.

### ANALGESIA

All the municipal midwives are qualified to administer analgesia in accordance with the rules of the Central Midwives' Board. All midwives are equipped for trilene administration. During the year municipal midwives administered analgesia to Warrington mothers as follows :—

Trilene  
270

Pethilorfan  
315

### OPHTHALMIA NEONATORUM

No cases of ophthalmia neonatorum were notified during the year.



MATERNITY OUTFITS

A free issue of maternity outfits is made in accordance with Ministry of Health Instructions, namely, to those patients whose confinement will be conducted under the National Health Service arrangement. 366 such outfits were issued during the year.

VISITS PAID BY MUNICIPAL MIDWIVES

	For Ante-natal Care	During Puerper-ium period	After 10th day (for post-natal care)	To Pupils' Cases	For Other Reasons	TOTAL
Doctor not booked ... ..	1	—	—	—	36	37
Doctor booked	2235	2339	138	1971	605	7288
TOTALS ...	2236	2339	138	1971	641	7325
Visits to patients discharged from hospital before 10th day						2954

During 1969 567 maternity patients were discharged from hospital before the tenth day of puerperium.

HOME NURSING

STAFF

- At 1st January, 1969, the staff consisted of :—
- 1 Superintendent Nursing Officer.
  - 14 Whole-time Home Nurses.
  - 1 Part-time Home Nurse.

- At 31st December, 1969, the staff consisted of :—
- 1 Superintendent Nursing Officer.
  - 15 Whole-time Home Nurses.

ORGANISATION

Prior to the inception of the National Health Service in 1948, the Home Nursing Service was provided on a voluntary basis by the Warrington Nursing Association which, for many years, had rendered very valuable service to the community. For a short time after the commencement of the National Health Service the voluntary body continued to operate as agents for the Corporation, but, with increasing costs resulting from expansion of the service in the early 1950s, the service was handed over to the authority but continued to operate on very similar lines. The reorganisation of the service took place at the beginning of the year and the three groups of Home Nurses operated satisfactorily during the period under review.

CASES ATTENDED

The tables below give details of the number of cases attended, the disposal of cases, and visits paid, by Home Nurses during the year.

Number of cases at 1/1/69	....	....	....	....	....	398
Number of cases added in year	....	....	....	....	....	940
Number of cases on books at 31/12/69	....	....	....	....	....	423

Of the total of 940 new cases attended during the year 17 were under 5 years of age, and 544 were over 65 years of age.

1,338 cases were attended during the year. The table below gives details of the 915 cases removed from the books during the year.

Medical	....	....	....	....	....	....	701 cases
Surgical	....	....	....	....	....	....	191 „
Infectious Disease	....	....	....	....	....	....	5 „
Tuberculosis	....	....	....	....	....	....	— „
Maternal Complications	....	....	....	....	....	....	3 „
Others	....	....	....	....	....	....	15 „
TOTAL							915 cases

VISITS PAID

Home Nurses made a total of 43,695 visits to all cases during the year, compared with 42,781 in 1968. Details of the number of visits paid to the various types of case are given below :—

To medical cases	....	....	....	....	....	34,815
To surgical cases	....	....	....	....	....	8,396
To cases of infectious disease	....	....	....	....	....	98
To cases of tuberculosis	....	....	....	....	....	129
To cases of maternal complications	....	....	....	....	....	8
To other cases	....	....	....	....	....	249

INJECTION CLINIC

This clinic is held at Garven Place during each afternoon from Monday to Friday. During the year 120 patients made 1,460 attendances at the clinic for the purpose of receiving injections.

SICK ROOM EQUIPMENT

The purpose of this service is to provide sick room equipment for short periods only. This is a service which is always greatly appreciated by the patients. The number of articles issued during 1969 rose to 566 as against 449 in 1968.

The equipment is only issued following a request from the family doctor or nurse to persons residing in the County Borough. The continuous demand for this type of equipment means that each case has to be reviewed every three months.

Equipment which is required on a permanent basis is not supplied by the Health and Welfare Department, but is obtained from the Department of Health and Social Security on the recommendation of a Consultant Physician.

INCONTINENCE PADS

These pads are supplied where necessary to persons who are in need. No charge is made for this service, but the patient is expected to dispose of the pads where possible. Arrangements can, however, be made for incineration in exceptional circumstances.



## DOMESTIC HELP SERVICE

### STAFF

At 31st December, 1969, the staff consisted of :

- 1 Domestic Help Organiser
- 2 Domestic Help Visitors
- 1 Clerk/Typist
- 121 Domestic Helps

### ORGANISATION

For the first time since the commencement of the Service in 1948 the number of Domestic Helps on the pay roll at the year end fell by 9 to 121. In spite of this no new applicant was refused help. There has been, and is, an ever growing problem of attracting women of the right calibre to undertake the very demanding work of caring for the aged who are still by far the main recipients for help.

Of the 750 cases on the books at 31st December, 1969, 36 were paying full cost for their help and 688 were receiving the services free of charge; 26 were paying a reduced rate.

### STATISTICS

The following table gives details of the numbers and types of cases attended and the visits paid by Domestic Helps during the year:

Categories of Cases	Total cases dealt with during 1969	Total visits	Cases on books at 31st Dec., 1969
Chronic Sick and Aged ... ..	950	57954	742
Tuberculosis ... ..	4	132	2
Acute illness ... ..	8	57	1
Mothers with young children ...	10	360	5
Maternity ... ..	13	68	—
TOTALS ... ..	985	58,571	750

The above table reflects the pattern of previous years, the Chronic Sick & Aged category accounting for over 96% of the help allocated during the year.

The maximum weekly charge for Maternity cases remained unchanged at £4 and the number of cases dealt with was double that of the previous year.



DETAILS OF SOURCES OF APPLICATIONS IN THE YEAR 1969  
ARE LISTED BELOW :

General Practitioners	....	....	....	....	59
Hospitals	....	....	....	....	29
Health Visitors	....	....	....	....	7
Home Nurses	....	....	....	....	10
Mental Health	....	....	....	....	2
Department of Health & Social Security	....				21
Welfare Services	....	....	....	....	13
Midwives	....	....	....	....	10
Blind Welfare	....	....	....	....	5
Applicants of Family	....	....	....	....	56
Others	....	....	....	....	40
					<hr/> 252 <hr/>

General Practitioners, Hospitals and Families were responsible for introducing most of the new cases and 144 of the 252 applicants were from these sources.

1969

VISITS BY DOMESTIC HELPS

Period	Chronic Sick and Aged	T.B.	Acute Illness	Mothers with young children	Maternity	Total
January ...	5132	20	7	19	6	5184
February ...	5105	21	7	24	9	5166
March ...	4938	24	—	26	—	4988
April ...	4373	9	8	23	—	4413
May ...	5978	6	1	40	15	6040
June ...	4707	7	1	38	8	4761
July ...	4843	8	—	47	12	4910
August ...	3773	3	1	19	5	3801
September ...	3932	7	8	29	—	3976
October ...	5289	10	17	40	—	5356
November ...	4499	8	4	27	5	4543
December ...	5385	9	3	28	8	5433
TOTALS ...	57954	132	57	360	68	58571

The above table shows more accurately the proportion of the total resources used to maintain the Aged in their home environment.

## CHIROPODY SERVICE

Treatment has continued to be given at the three clinics, full time at Garven Place and on a sessional basis at Orford and Folly Lane.

Staff shortages have again resulted in periods without sessions at Orford and Folly Lane although the total number of sessions worked has risen slightly.

Due to the demand on the service a waiting list is in operation. Cases are dealt with in rotation but whenever possible some priority is given to those having other complications such as diabetes or arterio-sclerosis, where 'self-help' is impracticable.

Priority Group	Cases on Books 31/12/ 68	No. of new cases seen	No. of attend-ances made	Transport		Cases on books 31/12/69
				No. of cases	No. of journeys made	
Aged and Infirm ....	1196	207	4441	108	426	1346
Physically Handicapped	—	9	41	6	26	4
Expectant and Nursing Mothers ....	—	4	9	—	—	—
TOTALS	1196	220	4491	114	452	1350

Total number of Sessions .... 632

# AMBULANCE SERVICE

## ORGANISATION

The area covered by the service was again the same as in previous years. The service continued to afford emergency cover to parts of Lancashire County area around the town and some casual work was undertaken for Cheshire County Council, mainly of an emergency nature.

During the year, owing to vehicle difficulties, a portion of the daily load of Junior Training Centre transport was handed over to a private contractor.

In 1968 the total numbers of persons carried was 48,733. In the year under review the total numbers carried had exceeded this figure before the end of November, and the final total of persons carried was 52,642, an increase of 3,909, or 8%.

The general trend of demand upon the service has shown little change from the previous year, and apart from the slight slackening off in demand immediately after the handing over to private transport of part of the Junior Training Centre work, the latter months of the year have shown a steady growth in demand which will soon offset this loss of work.

## PREMISES

As a result of further consultation regarding the siting of the proposed new ambulance station a much more convenient site from an operational point of view was agreed.

The only problem with the new site, on the Farrell Street extension, would seem to lie in its close proximity to the concentration of electrical installations associated with the Power Station. This proximity may well make it necessary for the aerial mast for our radio transmitter to be sited away from the actual station area.

In this respect it may well be possible for the service to share space on the aerial site which has recently been suggested at Hill Cliffe. If this were possible it would offer excellent radio coverage over the whole of our present area, and would be invaluable in the event of changes in the boundaries covered as a result of any new legislation affecting the area.

## TRAINING

In spite of our approaches to the Department of Health and the associated Training Board, the courses of training undertaken by us did not obtain recognition.

This is understandable in view of the financial desirability of concentrating training at a few large establishments.

This failure to obtain recognition has, however, had an unfortunate effect upon the new entrants to the service for whom these courses were provided. In effect it has meant that under the strict terms of the recent wage scales for ambulance personnel, they could not be suitably remunerated.

The Authority is at present reviewing these particular special cases.

As a result of our courses not being recognised nationally, it may be desirable to make available to these men a short course at an approved establishment so that they may obtain a nationally recognised certificate.



All new entrants will need to be given the opportunity of attending a full six weeks course, preferably after having served a probationary period of at least six months with the service. During this period they should, as is suggested by the Training Board, be given a short local course in basic principles and skills.

## *VEHICLES*

As was stated in the report for 1968, two vehicles were replaced during the year. Unfortunately the vehicles to be replaced did not remain in a sufficiently roadworthy condition until the delivery of replacements was completed. This failure was the basic cause of the adverse press publicity earlier in the year. Since the need to avert any repetition of this kind of vehicle failure is of vital importance, the Transport Department have co-operated in making an assessment of the probable useful life of all the vehicles operated by the service.

As a result of this assessment a further replacement vehicle for the remaining twelve-year-old vehicle was authorised and is at present on order.

During the year authority was also given for the purchase of a Special Welfare vehicle, incorporating a hydraulic tail lift to accommodate patients confined to wheel-chairs. The specifications for this vehicle have now been made out after extensive research into the various types used by neighbouring authorities. This vehicle, although it may be operated by the Ambulance Service, will remain essentially a Welfare vehicle, and in the event of any structural change in the functions of the Health Department, would be transferred with the duties involved.

In addition a further Dual-purpose vehicle was authorised as an addition to our fleet, and is due for delivery early in 1970.

The maintenance and repair of the vehicles has also produced problems. The Department has no maintenance staff of its own, and while a private contractor did his best to carry out the service, the number of repairs needed, often only of a minor nature, made it difficult to lay the vehicles off the road while still maintaining a service.

It is very difficult to get repairs carried out by private firms who are already heavily committed, and when such repairs are undertaken by them long delays ensue, not uncommonly due to the difficulty in obtaining spare parts. To try to overcome some of these difficulties the Authority has decided to carry out repairs and maintenance in the Transport Department Workshops.

## *EQUIPMENT*

Worthy of special mention is the provision during the year of two Casualty-Immobilisers. This equipment consists of a bed divided into two sections, each of which is filled with expanded plastic granules. When in use the bed can be moulded to the contour of the patient in the position most suitable to his condition, and then by means of a vacuum pump, the air is exhausted from one or both bed sections, which as a result form a firm cast to the patient's contour. This item will be particularly effective when patients needing maximum immobility have to be transported over any long distance.

## *ACCIDENTS*

1969 was again reasonably free from anything but minor accidents, and only in one instance was injury suffered by a member of the staff. This injury was not caused by any fault of our vehicle or equipment.

## *FALSE CALLS*

The service was again reasonably free from malicious false calls, and it is to be hoped that this most dangerous and annoying offence will be completely eradicated.

## *TRANSPORT TO OTHER THAN WARRINGTON HOSPITALS*

The numbers involved in these journeys again showed a large increase, the increase being in the main confined to patients travelling to Liverpool Hospitals and to Winwick Hospital. Patients transported to Manchester and other hospitals remained about the same as last year.

As was stated last year it is this type of work which has the greatest impact upon vehicle and staff availability, and if this increasing trend continues at the present rate, a staff revision may become necessary.

## *TRANSPORT WITHIN THE GENERAL HOSPITAL*

This work is continuing at a very high level. Since the opening of the new wards at this hospital, and the opening of a Satellite X-ray unit, the numbers of patients transferred, mostly full ambulance cases, has increased considerably and is proving a heavy burden on the service. This effect is aggravated by the fact that so many of these transfers have to be carried fairly strictly to times to fit in with the other work of the departments concerned.

As further development takes place at the General Hospital it would seem that this type of work will continue to increase with the consequent tying up of vehicles and men for protracted periods daily.

## *STAFF*

The present staff consists of four Control Assistants, who are not deployable men—four leading drivers, who, while being deployable staff, deputise for Control Assistants when required by sickness or holidays—sixteen Driver Attendants, operating rotating shifts, and five Day Workers, working Mondays to Fridays only, except if required to take the place of a shift worker at holiday times or due to sickness.

The establishment has still one vacancy for a sixth Day Worker not filled at the end of the current year.

Authority is also held for the further increase of the staff in 1970 by two men.

During 1969 the service has again been beset by long periods of absence of staff due to sickness, and like most other industries, the recent influenza outbreak has caused considerable problems in providing the necessary cover at all times.



## STATISTICAL TABLES

The following tables give details of work carried out in respect of Warrington patients, in the areas operated by agreement with Lancashire County Council, and for other Ambulance Authorities.

### WARRINGTON CASES

	No. of patients carried				Miles	
	Emergency	Infectious disease	Sickness	Total	No. run	Average per patient
Ambulances .	1904	15	11399	13318	50812	3.81
Sitting-case vehicles ...	186	22	39016	39224	88675	2.26
TOTALS ...	2090	37	50415	52542	139487	2.65

### CASES IN LANCASHIRE COUNTY AREA

	No. of patients carried				Miles	
	Emergency	Infectious disease	Sickness	Total	No. run	Average per patient
Ambulances .	70	—	1	71	481	6.77
Sitting-case vehicles ...	2	—	—	2	14	7.00
TOTALS ...	72	—	1	73	495	6.78

### CASES IN CHESHIRE COUNTY AREA

	No. of patients carried				Miles	
	Emergency	Infectious disease	Sickness	Total	No. run	Average per patient
Ambulances .	17	—	—	17	180	10.58
Sitting-case vehicles ...	—	—	2	2	30	15.00
TOTALS ...	17	—	2	19	210	11.05

### OTHER CASES

	No. of patients carried				Miles	
	Emergency	Infectious disease	Sickness	Total	No. run	Average per patient
Ambulances .	—	—	5	5	77	15.40
Sitting-case vehicles ...	—	—	3	3	16	5.33
TOTALS ...	—	—	8	8	93	11.62



NO. OF PATIENTS TRANSPORTED TO OR FROM OTHER THAN  
WARRINGTON HOSPITALS

(Not including THELWALL GRANGE TRANSFERS)

	Number of patients carried				Combined Total
	Winwick	Liverpool	Manchester	Other	
Ambulances ....	388	833	40	86	1347
Sitting-case vehicles ....	3452	811	165	128	4556
TOTALS ....	3840	1644	205	214	5903

SUMMARY

		No. of patients carried		No. of miles run
Warrington cases ...	...	52542	...	139487
Lancashire C.C. cases ...	...	73	...	495
Cheshire C.C. cases ...	...	19	...	210
Other cases ...	...	8	...	93
TOTALS ...	...	<u>52642</u>	...	<u>140285</u>

			1969	1968
Average number of miles per patient :	Ambulances	3.84	3.93	
	Sitting-case vehicles	2.26	2.35	
	All vehicles	2.66	3.11	

# MENTAL HEALTH SERVICE

## SUBNORMALITY

At the end of the year, 174 patients, as shown below, were in the community care of the Authority :—

Category of patient	Under age 16		16 yrs. and over		Total	
	Male	Female	Male	Female	Male	Female
Subnormal patients receiving routine home visits ...	—	—	4	7	4	7
Severely subnormal patients receiving routine home visits ... ..	46	36	35	46	81	82
TOTALS ... ..	46	36	39	53	85	89
Patients included in figure above attending Day Training Centres ... ..	37	29	23	19	60	48

The routine visitation of the mentally handicapped patients is carried out by the Mental Welfare Officers, who, for this purpose, made 201 visits during the year. Of these, 50 visits were at the request of various hospitals with regard to social progress reports and home conditions for the purpose of leave, etc.

## JUNIOR TRAINING CENTRE

During the year 1969 the number of children attending the Centre rose from 54 to 58, and since those coming in were of nursery age there are an extremely high proportion of children under 12 years old. The attendances remained good.

Again this year a number of functions have been held to which parents have been invited; a Coffee Evening for parents to meet staff, a Sports Day, Harvest Festival and an Open Day. All of these were well attended.

The boys from Richard Fairclough School came to help with various activities and a number of girls from the same school began coming regularly to help in the Nursery Classes. At Christmas time the older children were given a party at Richard Fairclough School, the girls providing the refreshments and the boys planning games and entertainment. It was a very nice gesture and appreciation is expressed to both staff and children of Richard Fairclough for arranging it.

Groups of children were taken on various outings—e.g., a visit to the Railway Station, to the Bus Depot, to the Locks and the Fire Station, as well as a group to Blackpool to take part in the annual Inter-School Sports, an event somewhat marred this year by bad weather.

All the routine activities of the school continued as usual, including woodwork and cookery. A member of the staff went to the Adult Training Centre one day a week to take cookery, handwork, social training, etc., in exchange for a member of the Adult Training Centre Staff who took woodwork with the boys at the Junior Centre.

Following an invitation to send entries to a display of Art by Mentally Handicapped Children we sent 5 exhibits.



For the first time this year a stall was provided at the Parents' Autumn Fair and this was very successful.

Details are given below of attendances at this Centre during the year.

No. of pupils attending at end of year      ....      ....      58

No. of attendances during year      ....      ....      ....      8704

The Centre was open on 178 days during the year and the pupils attained an attendance rate of 84·3 per cent of the maximum attendances possible.

Pupils attending the Centre who are unable to make their own way there are provided with transport to and from their own homes.

## HOSTEL

Salisbury House Hostel continued to function very satisfactorily during the year, providing accommodation for a maximum of 10 children. The conversion of the operation of this hostel to the foster mother principle has proved a great success and has given to the children there something approaching a real home environment. This is a great tribute to the foster mother and her husband who have devoted themselves to the care of these handicapped children and I cannot praise too highly the efforts they have made to provide a home.

There is urgent need for adult hostel accommodation for the subnormal and such a hostel is included in the Development Programme, and it is hoped that it will be possible to provide this in the near future.

			Under 16 years	Over 16 years	Total
No. of patients resident on 1.1.69	....	....	6	2	8
No. of patients resident on 31.12.69	....	....	7	2	9
No. of patients resident days during year	....	—	—	—	2721

## ADULT TRAINING CENTRE

The first full year has passed in the new Training Centre and the trainees have benefited from the greater facilities and spaciousness of the new building. There has been a steady increase in the number of trainees and staff.

During the year one member of the staff has been seconded to the 1-year Course for the Diploma for Teachers of Mentally Handicapped Adults and arrangements have been made for a second member to attend the course next year.

Some exchange of staff continues between the Junior and Adult Centres so that Handicraft Classes which adapt pupils to industrial work are held in the Junior Centre, and a certain amount of education continues in the Adult Centre. It is intended in the next year to develop considerably the educational facilities in the Adult Centre when the present member of staff returns from the Diploma Course and, to facilitate this, the authority has agreed to the appointment of an additional Instructor.

The industrial work carried out in the Centre has continued on the same lines as in previous years but has increased in volume, and includes the making of packing cases for various firms, vegetable crates, drying trays, punching of wire filters, cutting brass rods, assembling of plastic components,



cardboard divisions and cleaning of plastic bottles. The work carried out by the men is more satisfying than that available for the women, and efforts are being made to find more rewarding work for the females.

The Centre was open on 226 days during the year.

Details of attendances are given below :

No. of trainees in attendance at beginning of year	....	....	34
No. of trainees in attendance at end of year	....	....	41
No. of attendances made during year	....	....	7793
No. of possible attendances during year	....	....	8310
Percentage of possible attendances achieved	....	....	93.4%

*OTHER FORMS OF MENTAL DISORDER*

In the care and after-care of the mentally ill and the mentally handicapped, close liaison is maintained with hospitals (both general and psychiatric), Consultant Psychiatrists and General Practitioners. In this field the social case work undertaken by the Mental Welfare Officers continues to be a most valuable sphere of activity as a supportive and preventive measure in the care and treatment of the mentally disordered. For this purpose the details of visits made by Mental Welfare Officers are given below :—

For the purpose of after-care	....	....	1,390
For other purposes	....	....	1,045

4,074 interviews were held by Mental Welfare Officers during the year as follows :—

At office	....	....	594
Home visits	....	....	2,083
Elsewhere	....	....	1,397

Included in the figures of 1,397 were 156 attendances at psychiatric out-patient clinics.

106 males and 133 females were admitted to the psychiatric hospitals through the Mental Health Service, 234 of whom were patients normally resident in the Borough. Details are given below of the sex and mode of admission of the 239 patients. Where figures are shown in brackets these relate to the number of out-of-borough patients included :—

	Males	Females	Total
Admitted informally	68 (1)	88	156 (1)
Section 25	19 (1)	24	43 (1)
Section 26	5	7 (1)	12 (1)
Section 29	10	11 (2)	21 (2)
Section 60	2	—	2

As in previous years, the figures do not include the small number of admissions not dealt with through the Mental Health Service.

The more effective working of a fully qualified staff in the consolidation of services for the community care of the mentally ill has resulted in a reduction in the number of admissions to psychiatric hospitals. Intensive social case work has been an important factor here. However, there is still much to be done in the community care of both subnormal and mentally ill and the main problem is still the admission of the elderly mentally infirm to psychiatric hospitals for treatment (owing to constant shortage of beds). Associated with this matter is the lack of suitable psycho-geriatric hostel accommodation, which, if available would reduce the number of cases in actual need of hospitalisation on the one hand, and provide for the most appropriate and effective after-care of such persons on the other. With regard to this problem I am still grateful for the consideration and assistance for these patients given by Winwick Hospital.

Liaison between the Mental Health Service and the Consultant Psychiatrists has resulted in the specialized facilities of Moston Hospital being made available and this has helped considerably in dealing with persons with associated problems of adolescence, drug addiction and alcoholism. To promote Mental Health education, talks by Mental Welfare Officers have continued to be given to schools, etc., to encourage the general public's awareness of the social and emotional problems associated with Mental Health.

As in previous years, help has readily been given to Mental Welfare Officers by the Police, Welfare Services, W.R.V.S., etc., and there has been co-operation with local departments of various ministries in the help and re-habilitation of mental patients.

### *STAFF*

On the return in July of the experienced officer from the one-year Social Work course, which he successfully completed, the Mental Health Section now has a fully qualified social work team.

Having previously agreed to accept students from the Manchester College of Commerce for field work training, the first of these students began her placement with the Mental Health Service in October, 1969.

For the benefit of residents in the Orford/Poplars area, one Mental Welfare Officer is now based at the Adult Training Centre. He is able to liaise with general practitioners at the Orford Health Centre and afford interview facilities in this district. This officer also co-operates with the supervisor of the Adult Training Centre in regard to social, behavioural and emotional problems of trainees attending the centre.

### *STUDENT NURSES*

As in previous years, 16 student nurses from Winwick Psychiatric Hospital were accepted for experience of the Health and Welfare Department, including sessions at both the Children's and Probation Departments.

### *GUARDIANSHIP*

There was one severely subnormal patient in guardianship at the end of the year.





# ENVIRONMENTAL CIRCUMSTANCES

## REPORT OF THE CHIEF PUBLIC HEALTH INSPECTOR

### INDEX

ENVIRONMENTAL POLLUTION	Page
Noise ....	52
Atmospheric Pollution—lead....	53
Smoke Control—supplies of solid smokeless fuel ....	57
Smoke Control Areas—the national picture ....	58
Smoke Control Orders—Warrington ....	59
Air Pollution—measurement ....	63
FOOD INSPECTION AND HYGIENE	
Training of personnel ....	74
Licensed premises ....	76
Frozen food storage ....	76
Cleaning routines ....	77
Food Hygiene (General) Regulations ....	78
Food complaints ....	78
Food inspection and condemnation ....	79
Food and Drugs sampling ....	80
Liaison with the Public Analyst ....	81
SANITATION	
Repairs to property, investigation of complaints ....	86
Public cleansing ....	86
Rodent and insect control ....	87
Public swimming baths ....	88
Pharmacy and Poisons Act, 1933 ....	88
Shops Act, 1950 ....	88
Miscellaneous legislation ....	89
Betting Shops ....	89
Water Supplies ....	89
HOUSING	
Clearance of unfit houses—1969 programme ....	90
Clearance of unfit houses—2-year programme ....	91
Clearance Areas represented during 1969 ....	93
Individually Unfit Houses represented during 1969 ....	94
Compulsory Purchase Orders confirmed during 1969 ....	94
Houses demolished during 1969 ....	94
Rent Act, 1957 ....	95
Enquiries concerning properties ....	95
Clearance statistics ....	95
OFFICES, SHOPS AND FACTORIES	
Offices, Shops and Railway Premises Act, 1963 ....	96
Factories Act, 1961 ....	99

## ENVIRONMENTAL POLLUTION

### NOISE

Twenty-nine complaints were received during the year relating to fifteen alleged noise nuisances. All were fully investigated and reductions in noise emission from the offending sources were generally achieved. Night shift working in several factories continues to be responsible for many complaints. In Warrington, the haphazard development of industry and housing has resulted in quite inadequate distances between many factories and the nearest houses. The factory noise is tolerated during the day-time, but at night becomes much more objectionable, particularly in the summer-time, when bedroom windows are, of necessity, kept open. The firms concerned may well be able to plead that the "best practicable means" of reducing noise emission are being employed, and the avoidance of disturbance of nearby residents in these cases is very difficult.

These problems underline the importance of the recognition of environmental factors such as noise in planning urban renewal and general redevelopment in a town such as Warrington. No opportunity of convincing the planning consultants and the Borough Surveyor's planning division of the need for adequate buffer-zones between industry and new housing has been neglected.

The noise from road vehicles is of increasing importance, and public concern is steadily growing as normal conversation is becoming impossible on the footpaths of so many of our streets. Although noise emission from road vehicles is not at present a Health Department responsibility, it is becoming obvious that the present system of enforcement is totally inadequate. Many Police Authorities are still without the necessary equipment to carry out road-side noise level readings, and some Chief Constables have stated that the procedure necessary to take these measurements is so complicated that they do not intend to attempt to carry them out. It is highly questionable whether the Police Authorities are in fact the right authorities to carry out this work. Whilst the prescribed noise-level limits for new vehicles are a useful first step, there is no doubt that, for a variety of reasons, an initially quiet vehicle can soon become much more noisy, and that realistic noise-levels must eventually be enforced by a greatly increased number of road-side observations, backed up by suitable penalties to deter offenders.

In the long term, the solution may well lie in the gradual exclusion of the internal combustion engine from built-up areas, and its replacement by some form of noiseless, possibly electric motive power. Our towns and cities could then once again become civilized places in which to live and work.



## AIR POLLUTION

### LEAD

During 1969 collected deposit gauge matter was again analysed for lead content each month, and the results, with soluble and insoluble lead now shown separately, are shown in table A.

The conclusion drawn last year, following the first few results, that the level of lead pollution gives no cause for alarm, is confirmed. At three of the four sites the soluble lead provides the bigger proportion, with the position reversed at Latchford. The figures for Latchford and Bank Park are appreciably higher than at the other two sites, and this is due to abnormally high single readings—Latchford (February) 5 times the average and Bank Park (November) 7 times the average. The analyst has indicated that it would be unwise to rely on single results as definitive, and it is a matter of interest to see whether future recordings produce occasional high returns at the same or other sites.

Increased interest is being shown in the incidence of metallic pollution and further scientific information and comparison data will become available. The statistics on lead measurement should, therefore, prove most useful, and the investigation will be continued.

Results of an investigation carried out in Palo Alto, California, have recently been published and comparison with the Warrington figures at various points is possible. The American exercise was designed to determine the effect on lead pollution of motor vehicle exhausts and numerous short term samples were collected during the five month “rainy” season (Nov.—April). Table B shows the comparison between the two sets of figures. An examination of the average lead per sample places the various sites from lowest to highest in the order shown below.

Site	Average lead per sample (milligrammes/litre)	Rainfall/ Lead Ratio
1. Foothills, Palo Alto ....	0·040	0·08
2. Bank Quay, Warrington ....	0·052	0·09
3. Sankey Bridges, Warrington	0·078	0·15
4. Latchford, Warrington ....	0·124	0·21
5. Bank Park, Warrington ....	0·149	0·32
6. Residential, Palo Alto ....	0·150	0·32
7. Freeway, Palo Alto ....	0·180	0·42

It might be thought that because of the difference in sample collection, and as the total American rainfall aggregate was only one third of Warrington's annual rainfall, that the figures would not reflect a true comparison. However, when the total rainfall/lead ratio is calculated it is found to follow exactly the same pattern and confirms the site grading in relation to the lead pollution levels.



The Palo Alto sites provide both highest and lowest levels—Freeway and Foothills. This is naturally explained by the nature of the sites and to compare with the Freeway, samples would have to be collected from the verge of the M.6 motorway, whilst presumably the Foothills is open country. The Warrington sites at Sankey Bridges and Latchford have some open country to west and east respectively so that, in relation to sites, Bank Park and Bank Quay could be expected to compare more closely with residential Palo Alto. It is, therefore, remarkable that the Bank Park and Palo Alto residential results are almost identical. The fact that the other town centre site at Bank Quay is on railway land, screened from road traffic by a tall boundary wall, having open and recreational land to the south and south-west, and probably only registering railway and industrial pollution, explains the low lead level at this site.

**TABLE A**

**WARRINGTON DEPOSIT GAUGES — LEAD CONTENT**

*(Total weight of lead in milligrammes with soluble and insoluble content in parts per million)*

	BANK PARK			BANK QUAY			SANKEY BRIDGES			LATCHFORD		
	Total	Parts per million		Total	Parts per million		Total	Parts per million		Total	Parts per million	
	lead	Soluble	Insoluble	lead	Soluble	Insoluble	lead	Soluble	Insoluble	lead	Soluble	Insoluble
January ... ..	0·163	0·030	0·001	0·185	0·030	0·001	0·225	0·040	0·001	0·269	0·046	0·001
February ... ..	0·500	0·060	0·030	0·500	0·040	0·038	0·720	0·040	0·110	2·500	0·100	0·420
March ... ..	0·530	0·040	0·100	0·460	0·040	0·070	0·570	0·040	0·080	1·740	0·060	0·240
April ... ..	0·670	0·150	0·110	0·390	0·040	0·028	0·310	0·050	0·015	0·310	0·050	0·011
May ... ..	0·280	0·030	0·002	0·356	0·032	0·001	0·460	0·038	0·008	0·357	0·025	0·011
June ... ..	0·636	0·050	0·182	0·105	0·015	0·010	0·101	0·010	0·014	0·405	0·050	0·105
July ... ..	0·037	0·007	0·010	0·011	0·008	0·003	0·845	0·032	0·003	0·027	0·003	0·110
August ... ..	0·205	0·020	0·010	0·110	0·014	0·001	0·105	0·015	0·004	0·066	0·002	0·009
September ... ..	0·367	0·042	0·125	0·203	0·060	0·025	0·437	0·090	0·129	0·273	0·078	0·046
October ... ..	0·285	0·018	0·150	0·104	0·007	0·049	0·107	0·007	0·054	0·194	0·086	0·028
November ... ..	5·780	0·510	0·016	0·191	0·009	0·005	0·836	0·076	0·007	0·546	0·036	0·016
December ... ..	0·508	0·085	0·009	0·585	0·085	0·009	0·426	0·068	0·008	0·244	0·036	0·009
TOTAL WEIGHT	9·961	—	—	3·200	—	—	5·137	—	—	6·931	—	—
Monthly		0·087	0·062		0·032	0·020		0·042	0·036		0·048	0·076
Average ... ..	0·830	—	0·149	0·267	—	0·052	0·428	—	0·078	0·578	—	0·124

**TABLE B**

*COMPARISON WITH LEAD CONCENTRATIONS EXISTING IN PALO ALTO, CALIFORNIA*

	PALO ALTO, CALIFORNIA				WARRINGTON, LANCASHIRE			
	Freeway	Residential	Foothills		Bank Park	Bank Quay	Sankey Bridges	Latchford
No. of Individual Samples ....	23	64	21		12	12	12	12
Total Rainfall Collected (Inches) ....	7.80	11.40	11.20		31.31	34.40	34.01	32.95
Total Lead Collected (Milligrammes) ....	3.25	3.66	0.92		9.961	3.20	5.137	6.931
Average Lead Content (Mg./litre, i.e. parts per million) ....	0.18	0.15	0.04		0.149	0.052	0.078	0.124
Maximum Lead Concentration (Mg./litre)	1.00	0.50	0.13		0.526	0.110	0.219	0.520
Minimum Lead Concentration (Mg./litre)	0.03	0.01	0.01		0.017	0.011	0.015	0.011
Average Soluble Lead (Mg./litre) ....	0.06	0.04	0.02		0.087	0.032	0.042	0.048

N.B.—No. of Samples: Palo Alto: Collected over short term periods during “rainy” season, November to April.

Warrington: Monthly deposit gauge samples during the year 1969 (rain in varying amounts each month).



## SMOKE CONTROL

### *SUPPLY OF SOLID SMOKELESS FUEL*

The gas and electricity boards state they have sufficient supplies of gas and electricity to cover all existing and future Smoke Control Orders in Warrington.

Unfortunately, the National Coal Board say there will be a temporary shortage of solid smokeless fuels during 1970/71 and they cannot guarantee supplies for existing areas or any new areas before April, 1971. They hope that by April, 1971, the shortages will be met by increased production from new plant. In consequence the operative dates of our next areas—Nos. 14, 15 and 16 have been altered from 1st June and 1st September, 1971, to 1st September, 1971 (Nos. 14 and 15), and 1st June, 1972 (No. 16). When these three Orders become operative 95% of the town will be smoke controlled and only one more Order—No. 17, to become operative on 1st June, 1973—will be needed to complete the programme. This last Order will probably be submitted to the Council for approval early in 1971.

The N.C.B., through their spokesman Lord Robens, are alleged to be campaigning for a temporary relaxation of **all** Smoke Control Areas—new and existing—for a period of two years. If this campaign is successful it will be a severe and totally unnecessary blow to the Clean Air Movement. In Warrington, for instance, over 80% of the people affected by Smoke Control Areas opt to use gas, electricity or oil. Generally speaking solid smokeless fuel—particularly gas coke—is only used in any quantity in the Orford estate areas which were the first orders to be made by the Council.

It is almost certain that during the Winter of 1970/71 the N.C.B. or the Coal Merchants' Federation will approach the Council and request a relaxation or deferment of the Smoke Control programme. It may be necessary to temporarily suspend smoke control for a limited period during the winter months to allow those people who burn coke to burn coal. We managed to get through last winter only by virtue of the coke produced at the Winwick Road gas works, and it is unlikely that this plant will save the situation this coming winter.

It may seem illogical to pursue the creation of new Orders—the Nos. 14, 15 and 16 and later the final No. 17—when existing Orders are in danger of being temporarily suspended. The reason is that it is essential that we sustain the momentum of the teams of administrative and technical staff, e.g. inspectors, salesmen, gas fitters, plumbers, builders, electricians, and continue with the conversion of old fashioned fireplaces, even if some of them (less than 20%) will burn coal this winter. When smoke control was suspended in 1963 (because of a shortage of solid smokeless fuel!) it took some two or three years to regain the momentum lost by the dissolution of the teams.

It is essential to actively pursue the completion of the programme despite the fact that it may be necessary to temporarily suspend some existing Orders during the Winter of 1970/71.

# SMOKE CONTROL—THE NATIONAL PICTURE

## SMOKE CONTROL AREAS

### PROGRESS REPORT

Position at 31st December, 1969

(Figures for England, supplied by Ministry of Housing and Local Government)

	England	Wales	Scotland	Northern Ireland
<b>Smokeless Zones</b> (Local Acts) in Operation ....	44	—	1	—
Acres, 3,400 ....				
Premises, 41,060 ....				
<b>Smoke Control Areas in Operation</b> ....	2,987	6	139	17
Acres ....	777,419	418	74,242	6,911
Premises ....	4,046,378	2,352	351,716	8,422
<b>Smoke Control Orders</b>				
Confirmed ....	177	1	6	10
Submitted ....	78	—	8	3
<b>Grand Totals</b> ....	3,286	7	151	30

### Smoke Control Position in Regions of England at 31st December, 1969

(Figures supplied by Ministry of Housing and Local Government)

(1)  Region	(2) No. of black area acres covered by smoke control orders con- firmed or awaiting decision	(3) Percentage* of total black area acreage in region so covered	(4) No. of black area premises covered by smoke control orders confirmed or awaiting decision	(5) Percentage* of total black area premises in the region
Northern ....	32,289	25.76	149,171	26.97
Yorkshire and Humberside ....	171,940	45.65	572,882	49.05
East Midlands ....	57,677	21.49	175,312	34.25
Greater London ....	229,847	70.28	2,031,757	76.97
North Western ....	177,147	44.15	758,875	44.56
West Midlands ....	81,492	32.72	369,331	35.12
South Western ....	7,505	28.49	28,697	19.26
Total (black areas)	757,897	42.72	4,086,025	52.54
Outside black areas	140,671		452,133	
<b>GRAND TOTALS</b>	898,568		4,538,658	

\* The percentage shown in columns (3) and (5) above are percentages of the *total* acreage and not the *total* number of premises in the black areas concerned. In practice it may not always be necessary for the whole of the black area authority's district to be covered by smoke control orders (e.g., there may be some areas of open country).



## SMOKE CONTROL ORDERS

During the year the Council approved the following Orders, which when effective will ensure that 95% of the County Borough is smoke controlled:

### No. 14 SMOKE CONTROL ORDER

#### DESCRIPTION OF THE AREA

An area of 166 acres or thereabouts bounded by a line commencing in the centre of Lovely Lane where it is crossed by the Warrington Branch of the main Cheshire Lines Railway which it then follows in a westerly direction to its junction with the main line and thence to the Borough Boundary which it then follows in a southerly direction to its crossing of the Warrington to Widnes branch railway which it follows in an easterly direction to a point directly in line with the centre of Thewlis Street and thence in a northerly direction along the centre of Thewlis Street and Lovely Lane to its point of commencement.

1.	<i>Estimated number of Dwellings in the area</i>	....	....	....	1,399
	made up as follows:				
	(a) Council owned	60			
	(b) Privately owned	1,339			
2.	<i>Estimated number of Exempted Dwellings subject to clearance and redevelopment</i>	....	....	....	276
3.	<i>Estimated number of Commercial and Business Premises</i>	....			74
4.	<i>Estimated number of Industrial Premises</i>	....	....	....	5
5.	<i>Estimated number of Churches, Schools, etc.</i>	....	....	....	4
6.	<i>Estimated number of Government Buildings</i>	....	....	....	Nil
7.	<i>Estimated number of Adaptions required</i>	....	....	....	1,649
	made up as follows:				
	(a) Council owned properties	57			
	(b) Privately owned properties	1,592			
8.	<i>Estimated total cost of conversions</i>	....	....	....	£53,608
	made up as follows:				
	(a) Warrington Council contribution being 6/10ths of Council owned properties and 3/10ths of the cost of converting privately owned properties	....	....		£16,638
	(b) Exchequer contributions being 4/10ths of the total cost	....	....	....	£21,443
	(c) Private owners or occupiers contribution	....	....		£15,527
9.	<i>Exemptions</i>				

All properties affected by the Council's clearance or redevelopment plans to be excluded from the provisions of the Smoke Control Order. I recommend that the Council make an Order to come into operation on the **1st September, 1971.**

### No. 15 (OLD BEWSEY) SMOKE CONTROL ORDER, 1969

#### DESCRIPTION OF THE AREA

An area of 193 acres or thereabouts bounded by a line commencing at the westerly junction of the main Liverpool to Manchester Railway and the Warrington Loop which it follows to its crossing of Lovely Lane, the centre of which it follows in a southerly direction continuing along the centre of Thewlis Street to the Warrington to Widnes Railway which it follows in an easterly direction to Bank Quay Station and from thence following the main London to Carlisle Railway in a northerly direction to its crossing of the main Liverpool to Manchester Railway which it follows in a westerly direction to its point of commencement.



1.	<i>Estimated number of Dwellings in the area</i>	....	....	....	757
	made up as follows:				
	(a) Council owned	32			
	(b) Privately owned	725			
2.	<i>Estimated number of Exempted Dwellings subject to clearance and redevelopment</i>	....	....	....	300
3.	<i>Estimated number of Commercial and Business Premises</i>	....			71
4.	<i>Estimated number of Industrial Premises</i>	....	....	....	9
5.	<i>Estimated number of Churches, Schools, etc.</i>	....	....	....	8
6.	<i>Estimated number of Government Buildings</i>	....	....	....	Nil
7.	<i>Estimated number of Adaptations required</i>	....	....	....	698
	made up as follows:				
	(a) Council owned properties	30			
	(b) Privately owned properties	668			
8.	<i>Estimated cost of conversions</i>	....	....	....	£21,710
	made up as follows:				
	(a) Warrington Council contributions being 6/10ths of Council owned properties and 3/10ths of the cost of converting privately owned properties	....	....		£6,805
	(b) Exchequer contribution 4/10ths of the total cost	....			£8,685
	(c) Private owners or occupiers contribution	....	....		£6,220

9. *Exemptions*

All properties affected by the Council's clearance or redevelopment plans to be excluded from the provisions of the Smoke Control Order.

I recommend that the Council be requested to make an Order to come into operation **1st September, 1971.**

**No. 16 (BEWSEY) SMOKE CONTROL ORDER, 1969**

*DESCRIPTION OF THE AREA*

An area of 230 acres or thereabouts bounded by a line commencing at the junction of the westerly Borough boundary and the Dallam Brook which it follows in a north-easterly direction to the main London to Carlisle Railway and which it follows to the Main Manchester to Liverpool Railway and from thence along the course of the said railway in a westerly direction to the Borough Boundary and thence along the Boundary in a northerly direction to its point of commencement.

1.	<i>Estimated number of Dwellings in the area</i>	....	....	....	1,079
	made up as follows:				
	(a) Council owned	738			
	(b) Privately owned	341			
2.	<i>Estimated number of Exempted Dwellings subject to clearance and redevelopment</i>	....	....	....	26
3.	<i>Estimated number of Commercial and Business Premises</i>	....			40
4.	<i>Estimated number of Industrial Premises</i>	....	....	....	6
5.	<i>Estimated number of Churches, Schools, etc.</i>	....	....	....	3
6.	<i>Estimated number of Government Buildings</i>	....	....	....	Nil
7.	<i>Estimated number of Adaptations required</i>	....	....	....	1,191
	made up as follows:				
	(a) Council owned properties	749			
	(b) Privately owned properties	442			
8.	<i>Estimated cost of conversions</i>	....	....	....	£38,707
	made up as follows:				
	(a) Warrington Council contribution being 6/10ths of Council owned properties and 3/10ths of the cost of converting privately owned properties	....	....		£18,915

(b) Exchequer contribution being 4/10ths of the total cost	£15,483
(c) Private owners or occupiers contribution	£4,309

9. *Exemptions*

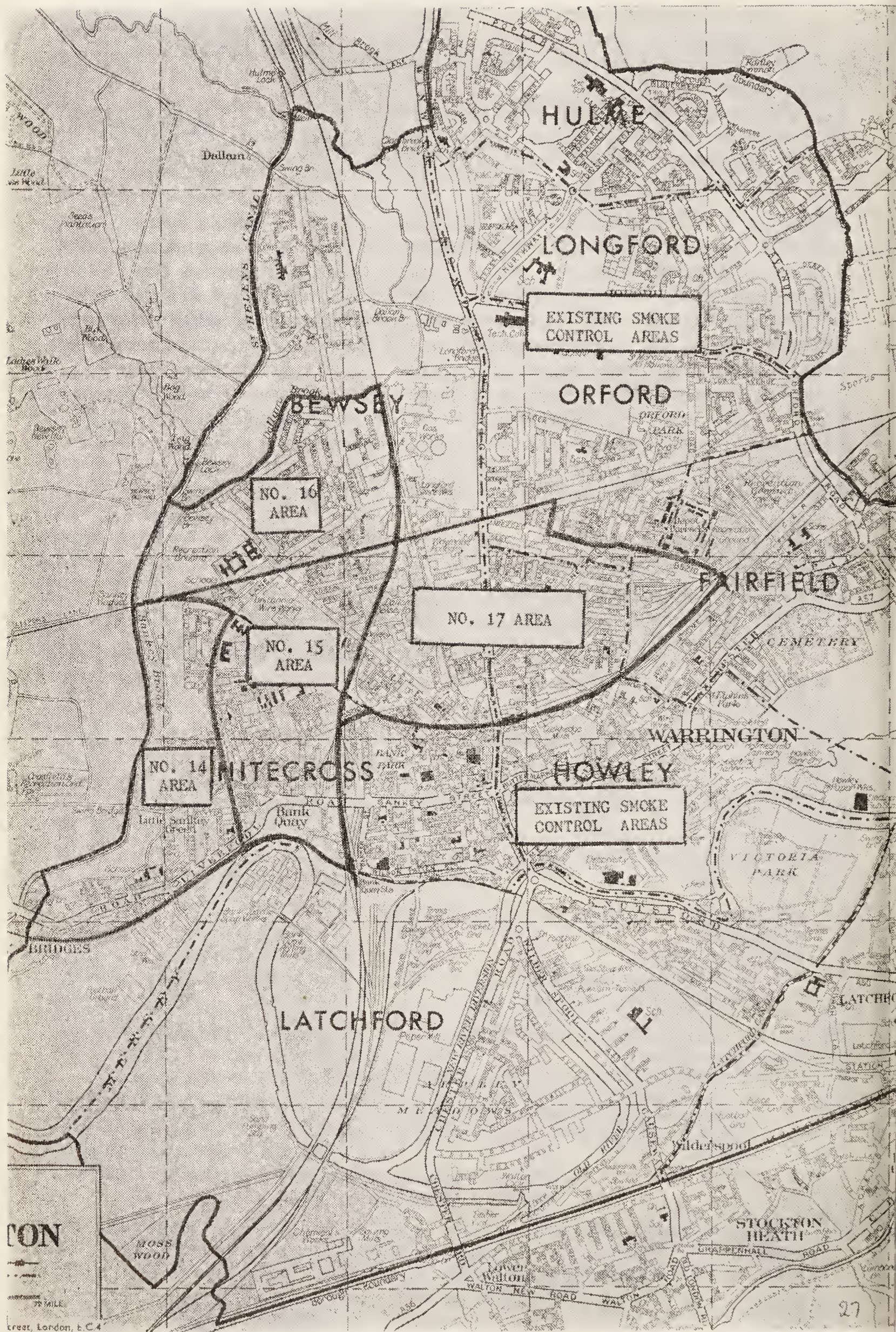
All properties affected by the Council's clearance or redevelopment plans to be excluded from the provisions of the Smoke Control Order. I recommend that the Council be requested to make an Order to come into operation **1st June, 1972.**

*SUMMARY OF PROPOSED SMOKE CONTROL AREAS*

The summary shows the estimated cost of implementing smoke control in three of the last four areas which remain before the town is completely smoke controlled. Areas numbered 14 and 15 (overleaf) are recommended for inclusion in next year's estimates because they embrace the Whitecross Redevelopment and Improvement Areas. If the environment in these areas is to be improved smoke control is essential.

	No. 14 Area	No. 15 Area	No. 16 Area
1. <i>ESTIMATED NUMBER OF DWELLINGS IN THE AREA</i> ....	1,344	1,024	1,089
made up as follows:			
(a) Council-owned ....	60	32	715
(b) Privately-owned....	1,284	992	374
2. <i>ESTIMATED NUMBER OF EXEMPT DWELLINGS SUBJECT TO CLEARANCE AND RE-DEVELOPMENT</i> ....	328	567	—
3. <i>ESTIMATED NUMBER OF COMMERCIAL AND BUSINESS PREMISES</i> ....	74	71	40
4. <i>ESTIMATED NUMBER OF INDUSTRIAL PREMISES</i> ....	5	9	6
5. <i>ESTIMATED NUMBER OF CHURCHES, SCHOOLS, etc.</i> ....	4	8	3
6. <i>ESTIMATED NUMBER OF GOVERNMENT BUILDINGS</i> ....	—	—	—
7. <i>ESTIMATED NUMBER OF ADAPTATIONS REQUIRED</i> ....	1,562	735	1,361
made up as follows:			
(a) Council-owned properties ....	57	30	800
(b) Privately-owned properties ....	1,505	705	561
8. <i>ESTIMATED COST OF CONVERSIONS</i> ....	£50,765	£23,888	£44,232
made up as follows:			
(a) Warrington Council contribution being 6/10ths of Council owned properties and 3/10ths of the cost of converting privately-owned properties....	£15,785	£7,459	£21,071
(b) Exchequer contribution being 4/10ths of the total cost....	£20,306	£9,555	£17,692
(c) Private owners or occupiers contribution ....	£14,674	£6,874	£5,469
9. <i>EXEMPTIONS</i> All properties affected by the Council's clearance or redevelopment plans to be excluded from the provisions of the Smoke Control Order.			
10. <i>OPERATIVE DATE</i> ....	June 1971	Sept. 1971	June 1972







## MEASUREMENT OF AIR POLLUTION

### 1. *Smoke and Sulphur Dioxide Concentrations* (National Survey Sites)

The mean daily average smoke concentration of the four sites showed a reduction of some 13% (from 128 to 111), whilst the corresponding sulphur dioxide concentration was reduced by 6% (152 to 143). Such reductions in a year when the general dispersive conditions were poor can be attributed to the progressive effect of the domestic smoke control programme. This is further illustrated in the smoke/sulphur dioxide ratios for the year, for whilst that at the Health Office—smoke controlled since 1963—remained the same, and there were slight reductions at Orford Lane (still to be controlled) and Richmond Avenue (under going control), there was a substantial reduction at the Ambulance Depot (controlled in 1968) as anticipated.

Poor dispersal conditions during the year are indicated by the number of readings from all sites which exceeded 500, viz. 24 smoke and 8 sulphur dioxide against 8 smoke and 4 sulphur dioxide in 1968.

The various statistics are shown in tables A, B, C and D and the graphs (page 73).

### 2. *Supplementary Measurements*

#### (a) *Volumetric :*

Additional measurements were continued during the year at St. Werbergh's School and the results are shown in Table C (Page 71), compared with the mean average for the four National Survey sites. The smoke concentrations are well below this average, but the sulphur dioxide is slightly heavier. This is now a smoke controlled site and compares in classification and results with the Health Office site having a smoke/sulphur dioxide ratio of 0.45.

#### (b) *Deposit Gauges :*

Two additional gauges were installed at the beginning of the year at Bank Park and Latchford respectively, and measurements were continued at Sankey Bridges and Bank Quay. The monthly and average deposits are shown in Table D (Page 72).

Slight increases were registered compared with 1968 at the two existing sites, probably due to increased rainfall. It appears that the general decrease in grit and dust fallout recorded in the years following the passing of the Clean Air Act, 1956, levelled out and have remained fairly stationary over the last five years. The Bank Park and Latchford sites have been used in earlier phases of this kind of measurement and previous results during separate periods at Bank Park illustrate the above point quite clearly. The Latchford site does show a reduction over the last few years, but as the previous measurements at this site were concluded in 1962 this could still be conforming to the same pattern. The deposit at this site is quite low and indicates that grit and dust emitted within the Borough does not drift to any extent outside the boundary.

## NATIONAL AIR POLLUTION SURVEY

A study of the distribution and a comparison of the levels of smoke and sulphur dioxide concentrations has been carried out on a regional basis by the co-ordinating and organising body, i.e. The Ministry of Technology Warren Spring Laboratory. The data concerning the North Western Region has recently been issued and the following information has been extracted :—

### *“Smoke and Sulphur Dioxide Concentrations—North Western Region Introduction”*

The North Western Region comprises Lancashire, Cheshire and the High Peak District of Derbyshire, covering some 3,000 square miles and containing  $6\frac{3}{4}$  million people,  $\frac{1}{8}$  of the population of Britain. Most of the population and industry is concentrated along the Mersey estuary through to the Manchester conurbation which lies in a salient tucked up against the foothills of the Pennine range.

For consistency with earlier and similar regional surveys the study covers the winter averages 1966–67 (October, 1966–March, 1967). All measurement results are expressed in units representing microgrammes per cubic metre.

### *Pollution by smoke—Assessment and Distribution*

Regional concentrations as a whole are higher than desirable, and, in the Greater Manchester area, are very much higher. Satisfactory levels for smoke concentrations would be a daily average of 100 or less, but the sites in the region in this category are few and far between and relate to open country, rural, or low density residential sites having the advantage of smoke control. Less than half the sites in the area have readings from 100 to 150, 55% are in the 150–200 class, 25% exceed 200 and 10% exceed 250. There is a tendency for smoke concentrations to be higher in the Manchester environs where there is a large proportion of sites having a high residential element.

### *Peak Concentrations*

These are, of course, recorded during adverse weather conditions when dispersive conditions are at their worst. During such periods the average concentration of all sites in the region increased by  $6\frac{1}{2}$  times the normal average. Again, taking an average of 100 as the desirable maximum smoke concentration, then peaks in excess of 500 would be considered abnormal, and it is clear that any site with an average concentration of over 125 can expect to have concentrations of over 500 on at least 5 days in the winter, and this on the basis of the 1966/67 winter, which had generally favourable dispersive conditions. However, a high ratio of peak smoke to winter average should be treated with caution as it need not indicate that a site is subject to high concentrations and that dispersion is poor, but could be the result of the unusual lateral spread of pollution from adjoining areas when vertical dispersion is severely restricted. The same reasoning would apply to sites in smoke control areas having neighbouring uncontrolled areas. Similarly, low ratios are not necessarily allied to an absence of high concentrations or good dispersion. If dispersion at a particular site is generally poor, the average pollution will be high, so that during times of widespread poor dispersion producing high ratios at other sites, conditions at this site may be little worse than usual.



### *Changes from year to year*

At most sites in the region there has been a decrease in pollution. For some 78 of the sites figures are available for the winters 1962/63 and 1967/68, and during this period there was an average drop, in fact, of 44%. In smoke controlled areas the reduction amounted to 56% and in non-controlled areas it was 42%. That the difference is not greater is not really so unexpected, the domestic coal consumption in the region in 1968 was 610,000 tons, and a lot of smoke is still being emitted. Smoke from uncontrolled areas adjoining controlled areas diminishes the effect, and the latter, although extensive, are mainly established in commercial town centres or low density residential areas at the town peripheries.

### *Comparison with the Rest of the United Kingdom*

The country is divided into 12 regions, and when placed in ranking order in terms of the percentage of regional sites recording concentrations below the target of 100 during 1966-67 winter, not only does the North Western Region lie bottom of the list, but its modal class is in the 150-200 range as opposed to Wales (under 50), the next 7 regions (50-100), and the following 3 regions (100-150). In addition it has the highest percentage of sites in the 200-250, and 250-300 ranges, and is the only region to have a site with a concentration over 400."

## **POLLUTION BY SULPHUR DIOXIDE**

### *Assessment and Distribution*

The lower limit of 100 is reached at only about 15% of the sites with the upper limit of 150 achieved by about 40%. However, 33% exceed 200, 15% exceed 250, and 6% exceed 300. As with smoke, the highest concentrations lie in the Greater Manchester Group, but in the rest of the region sites along the River Mersey also stand out, with high concentrations, and Birkenhead, Bootle, Liverpool, Widnes, St. Helens and Warrington all have sites with concentrations exceeding 200. Again, there is a tendency for concentrations to increase with residential density.

### *Peak Concentrations*

During periods of peak pollution the average sulphur dioxide concentrations in the region as a whole increased to four times the daily average and, as with smoke, the Greater Manchester area showed a higher degree of aggravation than the rest of the region. The number of sites with peaks in excess of 1,000 is small and all are within the Greater Manchester group. Nevertheless, 6 sites had concentrations over 1,500, 3 of which exceeded 2,000. However, as 1966-67 had relatively good dispersive conditions, and if the limit is lowered to 500—which, being an average over 24 hours will in any case probably include short term peaks of up to or over 1,000—then there are few sites where concentrations did not exceed that amount on at least one day during the winter of 1966-67.

### *Changes from year to year*

As with smoke, when the sites with records available for the winters 1962-63 and 1967-68 are examined, the drop in sulphur dioxide concentrations averaged 40%. From year to year, however, variations have been erratic, but, as with smoke, there is a hint that the downward trend has generally slackened over the past 2-3 winters (1965-68).



### *Comparison with the Rest of the United Kingdom*

Placed in ranking order in terms of the percentage of sites recording a winter average below the upper target limit of 150, the North Western Region lies 11th out of the 12, with only Greater London being marginally worse.

### *SMOKE/SULPHUR DIOXIDE RATIOS*

On the assumption that the ground level concentrations of smoke and sulphur dioxide are in the same proportions as emissions this ratio indicates the domestic and industrial contributions to the concentrations observed. It is generally accepted, taking into account the efficiency of combustion and the average sulphur content of the various fuels, that the smoke/sulphur dioxide ratio for domestic emissions from coal fires is about 1.25; for industrial coal-burning or domestic smokeless solid fuels the ratio is about 0.2, whilst from oil-fired installations the ratio is about 0.05.

The North Western Region during the winter 1966-67 had few sites with ratios less than 0.5 and most exceeded 0.75. Few sites have a domestic contribution of less than 70% and most exceed 85%. The median ratios for sites not in smoke controlled areas is 0.94, and the domestic contribution at half these sites is probably over 90%. However, for sites in smoke controlled areas the median drops to 0.67. In comparison, ratios in Inner London of 0.2-0.3 are common and ratios as high as 0.5 the exception.

No allowance has been made for the effect of smoke from road traffic or diesel engines, and although the national survey sites were selected to minimise this possibility, traffic and diesel smoke may be the cause of some of the higher ratios. However, a high ratio may not necessarily be due to excess smoke—it can be equally due to abnormally low sulphur, either in fact or through neutralisation by the presence of an alkali such as ammonia.

### *CONCLUSIONS*

Professor P. J. Lawther, Director of the Medical Research Council Air Pollution Unit, has stated that in his view and in the present state of knowledge, smoke in any concentration is undesirable and could well constitute a hazard to health. It should be eliminated as far as was economically possible. As nearly 95% of the sites in the South East Region had, during the winter under review, concentrations of less than 100, then this can be considered, for the present time, to be an achievable target.

On the effect of SO<sub>2</sub> on health, Professor Lawther added that there was no evidence that reasonably low concentrations of smoke were, of themselves, harmful, and if the concentrations of smoke were low he would be inclined to accept peak SO<sub>2</sub> concentrations of up to 1,000, but would consider anything in excess to be potentially harmful, at least to some people. This would mean, then, aiming at an average winter concentration limit of some 100-150.

In the winter of 1966-67 less than 20% of the North Western Region sites had smoke concentrations below 100, whilst at more than half they exceeded 150, and 25% exceeded 200. Sulphur dioxide concentrations of over 150 were recorded at 60% of the sites, with concentrations over 200 at 33%. Few sites, however, had days with concentrations over the acceptable limit of 1,000, but this was a relatively good winter in terms of dispersion. Despite this, most sites experienced days averaging over 500 and many of these would presumably be at risk during a winter with prolonged stagnant atmospheric conditions.



The domestic coal consumption in the North Western Region is still considerable and the smoke/sulphur ratios observed suggests that upwards of 70% of smoke concentrations have originated from domestic sources. When there is a complete switch to smokeless fuels, a reduction of 20% in the domestic contribution will be obtained, giving an overall general reduction of some 55%. Reductions of this order are necessary if the concentrations at the majority of sites are to be brought below the current target of 100, and parity achieved with the south. Ten years ago London was as highly polluted by smoke as anywhere else in the country.

In the case of sulphur dioxide, on the industrial side, there is a general trend away from coal to gas, electricity and fuel oil. With both gas and electricity, sulphur dioxide emissions are eliminated, and although sulphur content in heavy oils is high, with modernised plant and higher chimneys improvement may still result. A large proportion of ground level sulphur, however, still originates from domestic coal burner sources, and replacement by smokeless fuels should alleviate the position. Once the smoke concentrations are reduced there is the further advantage in that the heat of the sun is increasingly let in to break up inversions, so that natural dispersion will improve and decrease ground level concentrations of both smoke and sulphur dioxide. Thus, future prospects are encouraging, but it must be borne in mind that the limits for sulphur dioxide concentrations of 150 winter average or 1,000 as a peak are only acceptable in the absence of smoke.

# WINTER 1966-67—SMOKE AND SULPHUR DIOXIDE CONCENTRATIONS IN WARRINGTON

## INTRODUCTION

The concentrations at the Warrington National Survey sites have always been reported and analysed yearly from January to December. Under this system a continued decrease, with little variation, has been evident from year to year and as can be seen in Table A the smoke average of all sites for the year was 111 and sulphur 143. These figures appear to be most satisfactory, but the very low summer concentrations of the past few years have perhaps obscured to some extent the more critical winter averages. In view of this the figures for the 1966-67 winter have been extracted and general comparisons made with the Regional data.

## 1966-67 WINTER SMOKE CONCENTRATIONS (WARRINGTON)

The relevant figures are given below, with brief details of site classifications, and it should be noted that these are the type of sites which give the high readings prevailing in the North Western Region.

Site	Daily Average	Highest Daily Reading	Readings Exceeding		Peak Ratio	Classification of Site
			500	1000		
Health Office ....	140	1261	5	1	X9	XE Mixed Industrial/ Residential with some open space. B2 Medium density residential surr- ounded by built- up areas and inter- persed with ind- ustry. B2 High density resi- dential with some industry and surr- ounded by other built-up areas. A2
Ambulance Depot	175	758	4	—	X4.3	
Richmond Avenue..	212	685	10	—	X6.0	
Orford Lane Nursery	208	1246	8	2	X3.4	

The lowest concentration is at the Health Office which was the only site situated in a smoke controlled area in 1967. The Ambulance Depot figure is also reasonably good for this type of site, and although the other two readings exceed 200, they are approaching the lower limit of the 200–250 range.

It is, perhaps, surprising to find that the highest daily reading occurred at the site with the lowest average, thus giving a peak ratio of 9 times the average, whereas the regional average is  $6\frac{1}{2}$  times (with a range between 2.8 and 16.1). Peak concentrations at the other sites are in the lower range. Sites in the region in smoke control areas tend to have high peak ratios which is attributed to lateral drift from neighbouring uncontrolled areas during poor dispersive conditions. Whilst the number of readings over 500 is considerable, this is to be expected when the averages are at the level shown, but the fact that there were only 3 readings over 1,000 is more favourable.

The Warrington sites are amongst those in the region where results are available from the winters 1962-63 and 1967-68. The regional average



decrease in smoke concentrations over this period was 44%, whilst the Health Office was 52%, Ambulance Depot 47%, Orford Lane 55% and Richmond Avenue 29%. These figures on the whole are better than average and must be considered good in relation to site classification. The lower than average decrease at Richmond Avenue can be accounted for by high smoke concentrations caused by drifting smoke from the rest of the borough carried in the direction of this site by the prevailing westerly winter winds.

1966-67 WINTER SULPHUR DIOXIDE CONCENTRATIONS  
(WARRINGTON)

Site	Daily Average	Highest Daily Reading	Readings Exceeding		Peak Ratio
			500	1000	
Health Office ....	229	778	—	—	3.4 x Average
Ambulance Depot	93	254	2	—	2.7 x „
Orford Lane.....	164	402	—	—	2.5 x „
Richmond Avenue	164	396	—	—	2.4 x „

Compared with the regional averages these results are good. The Ambulance Depot reading of under 100 is achieved at only 15% of the regional sites and they are generally open country or rural sites. The Orford Lane and Richmond Avenue readings are approaching the target range of 100–150 and few, if any, sites of the same classification in the region are as low. The Health Office sulphur concentration is high, but this is affected by central heating plants in commercial premises and public buildings burning solid smokeless fuels, and is probably also affected by drift from neighbouring areas.

The favourable trend in the sulphur concentrations is further indicated by low peak ratios at all sites, by the absence of readings over 1,000 and only 2 readings over 500.

The percentage decrease in sulphur dioxide concentration between 1962-68 is Health Office 29%, Ambulance Depot 54%, Orford Lane 40% and Richmond Avenue 35%. The regional average decrease was 40% and the figures again compare favourably with the exception of Richmond Avenue—as with smoke and for the same reason. Actually, much industrial improvement had taken place in Warrington prior to 1962, and smoke control had already been commenced. Comparisons with measurements from earlier years would show far greater percentage decreases.

WINTER 1966-67: SMOKE/SULPHUR DIOXIDE RATIOS  
(WARRINGTON)

The smoke/sulphur dioxide ratios are 0.61 (Health Office), 1.88 (Ambulance Depot), 1.27 (Orford Lane) and 1.30 (Richmond Avenue). These ratios are high and indicate that the amount of smoke still being emitted is much greater than is desirable. The figure at the Ambulance Depot is somewhat abnormal, due to the very low sulphur reading and causes some speculation as to whether there is an alkali agent present which is nullifying the real sulphur level. Nevertheless, since 1967 these ratios are falling, but only very slowly.

CONCLUSIONS

Warrington Pollution Levels—Smoke and Sulphur Dioxide

The levels of pollution in Warrington compare favourably with the levels at similarly classified sites in the North Western Region. However, in view of the general high level existing there is still a great deal to be achieved.

Target concentrations—Smoke (100 or less) ; Sulphur Dioxide (100-150 range)

In Warrington we are slowly approaching the required levels, more so with sulphur dioxide than with smoke. It is believed that the present target levels will be achieved when the domestic smoke control programme is completed. The last remaining areas are, of course, composed of older high density terraced houses having a high pollution potential. In addition the residential portions of rural districts adjoining the Borough have begun to establish smoke control since 1967.

On the industrial and commercial side, conversions to low sulphur content oil, to gas and electricity will bring further improvement, as will the town centre redevelopment.

FUTURE MEASUREMENT

In view of the low summer readings now prevailing, and the fact that winter measurement is now the significant factor, future volumetric measurement need be undertaken only from October to March.

MEASUREMENT OF ATMOSPHERIC POLLUTION 1969  
STATISTICS

A: Volumetric Smoke and Sulphur Concentrations (National Survey Sites).  
(Results expressed in Microgrammes per Cubic Metre)

MONTH	SMOKE					SULPHUR DIOXIDE				
	H.O.	A.D.	OLN.	RAN.	Av'age	H.O.	A.D.	OLN.	RAN.	Av'age
January ....	158	216	223	254	213	245	150	126	227	187
February ....	160	137	224	275	216	242	135	135	233	186
March ....	142	101	200	207	172	251	171	159	200	194
April ....	86	58	117	123	107	178	118	153	157	152
May ....	38	45	71	89	64	148	104	134	127	128
June ....	32	42	55	52	46	150	88	140	102	120
July ....	21	47	41	33	34	88	62	101	63	79
August ....	26	59	38	43	39	99	76	98	60	83
September ..	30	91	60	68	54	134	108	112	103	114
October ....	56	113	88	143	95	164	124	144	117	137
November....	32	179	98	148	98	175	123	152	149	150
December ....	106	108	243	258	197	241	171	137	178	182
Yearly Mean....	74	108	122	141	111	176	119	132	143	143



B: Highest Daily Readings in Microgrammes per Cubic Metre.

MONTH	SMOKE				SULPHUR DIOXIDE			
	H.O.	A.D.	OLN.	RAN.	H.O.	A.D.	OLN.	RAN.
January ....	497	768	549	784	574	313	195	452
February ....	797	803	890	894	806	335	253	505
March ....	563	538	704	607	639	336	329	443
April ....	328	285	282	307	297	225	319	269
May ....	116	128	172	181	237	186	227	189
June ....	79	91	143	132	481	146	388	277
July ....	42	145	191	87	180	169	231	115
August ....	67	103	78	119	250	154	141	141
September ....	89	123	174	146	211	167	183	166
October ....	302	271	177	426	306	240	210	267
November....	105	266	252	335	276	224	264	212
December ....	333	528	654	606	643	903	210	402
No. of readings exceeding: 500	2	6	8	8	6	1	NIL	1
1000	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL

C: ADDITION VOLUMETRIC MEASUREMENT

SITE: ST. WERBERGH'S SCHOOL, IRWELL ROAD (MIXED RESIDENTIAL/INDUSTRIAL)

MONTH	SMOKE		SULPHUR DIOXIDE	
	Daily Average	Highest	Daily Average	Highest
January....	132 (213)	445	189 (187)	459
February ....	144 (216)	750	246 (186)	806
March ....	129 (172)	540	208 (194)	373
April ....	81 (107)	233	147 (152)	312
May ....	30 (64)	99	117 (128)	225
June ....	23 (46)	53	119 (120)	248
July ....	14 (34)	41	90 (79)	211
August ....	20 (39)	70	83 (83)	178
September ....	28 (54)	99	145 (114)	305
October....	59 (95)	291	139 (137)	257
November ....	47 (98)	255	169 (150)	275
December ....	131 (197)	464	198 (182)	572
Daily Mean ....	70 (111)	—	154 (143)	
	Total daily readings exceeding 500 .... 2		Total daily readings exceeding 500 .... 2	

N.B. In the above table the figure in brackets indicates the average concentration at the four permanent National Survey Sites over the same period.

# D : DEPOSIT GAUGE MEASUREMENTS 1969

(Deposits expressed in tons per Square Mile : Results for 1968 also shown at sites 1 and 2 in brackets)

MONTH	1. SANKEY BRIDGES		2. BANK QUAY		3. BANK PARK		4. LATCHFORD	
	Deposit	Rainfall in ins.	Deposit	Rainfall in ins.	Deposit	Rainfall in ins.	Deposit	Rainfall in ins.
January	11.79	(13.24)	23.09	(26.41)	17.19	2.80	13.25	3.07
February	18.88	(22.60)	27.74	(26.78)	12.20	2.91	11.30	2.48
March	18.10	(11.73)	21.69	(20.30)	16.78	2.01	7.99	2.99
April	12.24	(14.13)	28.10	(25.12)	31.64	1.38	10.80	2.80
May	12.72	(11.62)	21.49	(34.28)	13.37	4.69	9.10	5.08
June	15.57	(13.48)	28.90	(25.73)	8.70	1.81	6.24	1.97
July	12.07	(17.61)	22.55	(30.66)	8.81	1.18	8.79	1.10
August	13.86	(11.63)	39.00	(22.81)	12.69	3.66	13.49	3.15
September	10.97	(6.11)	29.61	(6.11)	17.26	1.18	9.19	1.14
October	10.22	(9.77)	22.88	(24.82)	9.96	0.91	7.89	0.87
November	33.12	(7.46)	No result	(12.40)	26.20	5.90	16.98	5.50
December	13.61	(10.97)	39.00	(14.95)	24.00	2.88	11.28	2.80
Mean Monthly Average	15.26	(12.53)	27.64	(23.96)	16.57	2.62	10.52	2.75

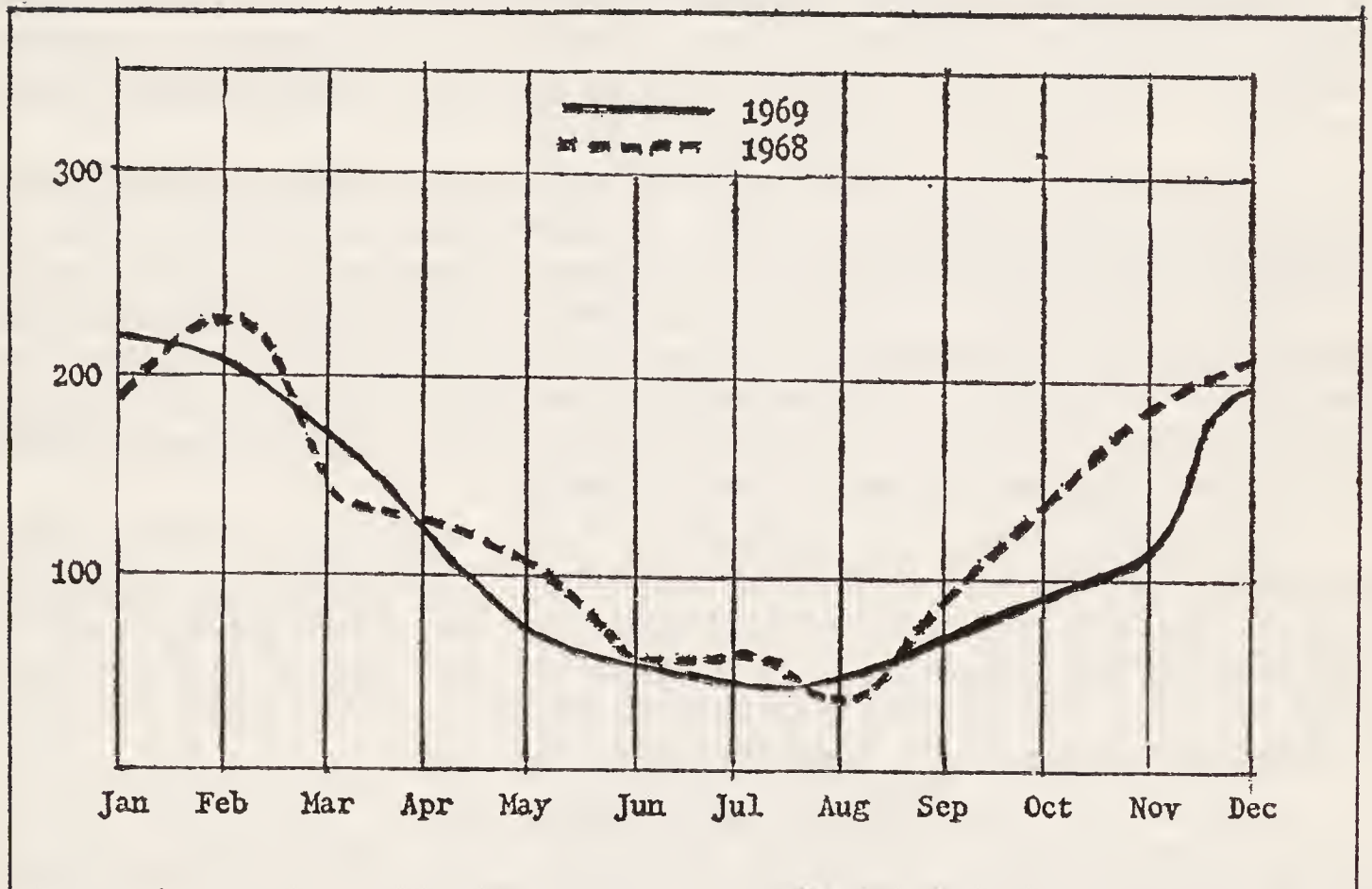
## PREVIOUS RECORDS FOR COMPARISON

BANK PARK	DALLAM FARM	CENTRAL POLICE STATION	LATCHFORD	WALTON PARK
Nov. 49/Sept. 56 .... 25.80 Jan. 63/Aug. 65 .... 15.27	Nov. 49/Sept. 62 .... 19.37 Jan. 63/Aug. 65 .... 12.60	Oct. 56/Dec. 62 .... 38.21	Oct. 56/Dec. 62 .... 13.60	April 57/Mar. 61 .... 11.72



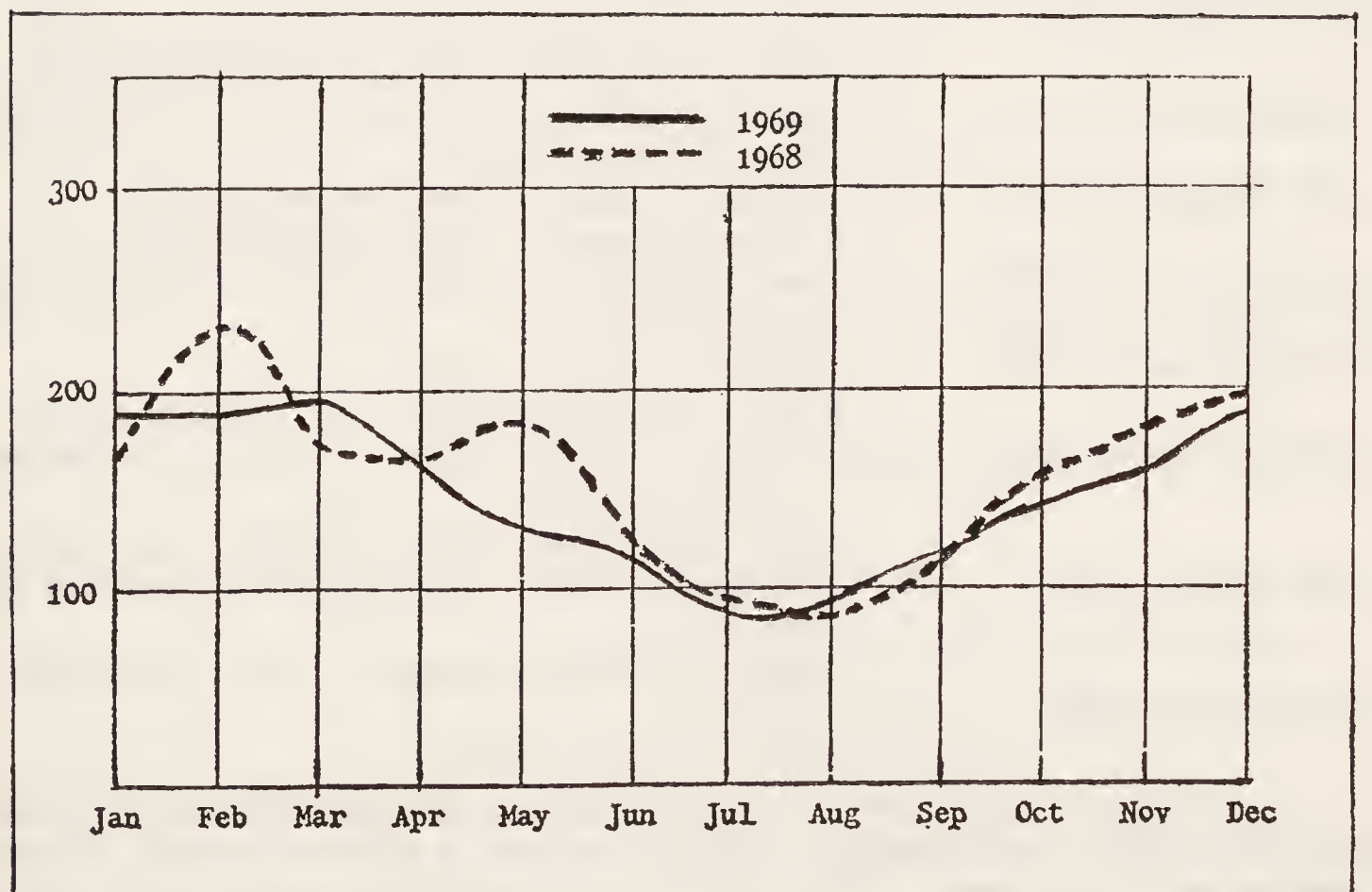
THE GRAPH SHOWS THE AVERAGE POLLUTION LEVEL OF THE FOUR WARRINGTON STATIONS DURING 1969 COMPARED WITH THE LEVEL DURING 1968

SMOKE CONCENTRATIONS  
(in microgrammes per cubic metre)



THE GRAPH SHOWS THE SO<sub>2</sub> AVERAGE POLLUTION LEVEL OF THE FOUR WARRINGTON STATIONS DURING 1968 AND 1969

SO<sub>2</sub> CONCENTRATIONS  
(in microgrammes per cubic metre)



## FOOD INSPECTION AND HYGIENE

### TRAINING OF PERSONNEL

This aspect of inspection and hygiene is considered to be most important, as inspections by the staff of the Department are of necessity, intermittent. Much better results may be obtained by educating the food handlers in the correct techniques and drawing their attention to the dangerous practices which are all too often observed by food inspectors and members of the public.

I would like to pay tribute to N. A. Buckley, the Deputy Chief Public Health Inspector, who has acted as Course Tutor to several courses of training in food inspection and food hygiene for members of the food trades over the last few years. Education, as opposed to prosecution, has been our theme, and Norman Buckley is a most fluent and able advocate of this policy. It is always a sad commentary on food inspection and hygiene practices when we have to resort to a prosecution for a contravention of the regulations designed to prevent food poisoning.

The turnover of staff—particularly junior staff—in the food trades makes the training very difficult for employers. Quite clearly, an appreciation of the basic principles of food inspection and food hygiene must be cultivated in the schools if we are to make any real impact upon the quite deplorably low standards of food hygiene which we still encounter in cafes, restaurants, public houses, canteens and in the home.

Norman Buckley organised the following courses of lectures for food trade personnel during the year. Two-thirds of the students who prepared for the Royal Society of Health and Royal Institute of Public Health & Hygiene Certificates were successful—a tribute to his patience and teaching.

7th January, 1970	1. <i>Introduction</i> Working of digestive tract. Film – “Your Digestion”.
14th January, 1970	2. Elementary Bacteriology. Film – “Food without Fear.”
21st January, 1970	3. Food poisoning and other food-borne illnesses. Film – “Another Case of Food Poisoning.”
28th January, 1970	4. Food Poisoning – the transmission of infection. Film – “Fruit Fare.”
4th February, 1970	5. Protection of food from contamination. Film – “Cream – a rich inheritance.”
11th February, 1970	6. Food Premises – construction and equipment. Colour Slides.
18th February, 1970	7. Animal and Insect pests. Film – “Safety in store.”
25th February, 1970	8. Detergents and sterilisers – cleaning of premises and equipment. Film – “Outline of Detergency.”
4th March, 1970	9. The law relating to food and the handling of food. Film – “Fish Processing.”
11th March, 1970	10. Revision. Film – “Clean Food.”

In addition to the above course, which is designed to instruct food handlers in the fundamentals of food hygiene, a more advanced course commenced in January, 1970. This is designed to prepare food trade



personnel for the "Diploma in Food Hygiene" examination of the R.I.P.H.H., and is quite comprehensive, consisting of 22 two-hour lectures, shared between the Deputy Chief Public Health Inspector and a Food Technologist. This is the first occasion on which an advanced course of this nature has been attempted in Warrington, and the syllabus has been drawn up by the Health Department and the Warrington Technical College in consultation, as follows:

- |                     |  |
|---------------------|--|
| 9th January, 1970   | 1. <i>Introduction.</i><br>Food and diet, dietary hazards.   |
| 16th January, 1970  | 2. <i>Food Chemistry.</i><br>Simple chemistry of protein, fats, carbohydrates, vitamins, minerals, etc. Simple food tests.       |
| 23rd January, 1970  | 3. <i>Food Poisoning I.</i><br>Micro-organisms responsible for food poisoning and their detection.                               |
| 30th January, 1970  | 4. <i>Food Poisoning II.</i><br>Routine bacteriological testing of foods.  |
| 6th February, 1970  | 5. <i>Food Poisoning III.</i><br>Annual reports of the Ministry of Health.   |
| 13th February, 1970 | 6. <i>Cleaning and Sterilisation I.</i><br>Principles of sterilisation by heat and chemicals.                                    |
| 20th February, 1970 | 7. <i>Cleaning and Sterilisation II.</i><br>Design for sterility.  |
| 27th February, 1970 | 8. <i>Preservation of Food I.</i><br>Theoretical background.   |
| 6th March, 1970     | 9. <i>Retail Food Hygiene.</i><br>Hygiene of food – transport, storage, display and service.                                     |
| 13th March, 1970    | 10. <i>Preservation of Food II.</i><br>Traditional methods—curing, smoking, pickling, salting, sugaring, addition of acids.      |
| 20th March, 1970    | 11. <i>Preservation of Food III.</i><br>Radiation, anti-biotics, refrigeration, gas storage.                                     |
| 10th April, 1970    | 12. <i>Preservation of Food IV.</i><br>Canning, potential dangers of canned food.  |
| 17th April, 1970    | 13. <i>Preservation of Food V.</i><br>Accelerated freeze drying, quick frozen food.  |
| 24th April, 1970    | 14. <i>Food Hygiene I.</i><br>Meat and meat products—storage and handling of meat pies, sausages, ham, raw meats and cold meats. |
| 1st May, 1970       | 15. <i>Food Hygiene II.</i><br>Bakery and products—organisation, handling, storage and distribution.                             |
| 8th May, 1970       | 16. <i>Food Hygiene III.</i><br>Dairy products—cheese, butter, cream, etc., preparation and storage—pasteurisation.              |
| 15th May, 1970      | 17. <i>Food Hygiene Regulations I.</i><br>Registration of premises, temperature control, seizure of unsound food.                |
| 22nd May, 1970      | 18. <i>Food Hygiene Regulations II.</i><br>Heat Treatment regulations, milk and dairies regulations, etc.                        |

5th June, 1970	19.	<i>Education in Food Hygiene.</i> Methods available to employers and public authorities.
12th June, 1970	20.	<i>Complaints.</i> Nature and handling of complaints, causes and remedies.
19th June, 1970	21.	Revision I.
26th June, 1970	22.	Revision II.

Of the 10 candidates who attempted the Diploma examination, 8 were successful.

### *LICENSED PREMISES—PUBLIC HOUSES—RESTAURANTS—CLUBS*

Possibly as a result of the attention given by the Inspectors to the cleanliness and equipment of public houses, the Licensing Magistrates have decided to carry out a programme of inspections of the licensed premises in Warrington. This commenced early in 1970. Health Inspectors accompany the Magistrates on their visits and early results confirm that there are many licensed premises which fall below a reasonable standard. Such items as sinks, wash hand-basins and hot water supplies are still to some degree lacking, and decorative standards in many premises are poor. The breweries concerned will need to give more attention to improving their premises in order to avoid legal proceedings under the provisions of the Shops Act, Food and Drugs Acts, and Public Health Acts. The uncertainty of the future life expectancy of many town centre public houses has for many years been partly instrumental in delaying the improvements. With the publication of the Consultants' Master Plan, and the Corporation's own proposals for the centre area, much of the doubt should now be resolved.

The system of inspection of licensed and registered clubs by the Chief Public Health Inspector's representative continued throughout the year. During the autumn, many applications for renewal of registration were received, when the five-year periods granted at the coming into force of the Licensing Act, 1964 expired. During these inspections, the opportunity is taken to insist on the installation of good equipment and sanitary accommodation, and good decorative standards. Many clubs now show considerable improvement.

### *FROZEN FOOD STORAGE*

It is becoming increasingly apparent that many food traders do not understand the principles of safe frozen food storage, namely: strict stock rotation, cabinet loading and correct temperature control.

Electric thermometers have been used extensively during food premises inspections. Such thermometers have quick, accurate response to temperature differences and are ideal for food storage temperature work.

Food shop managers rarely appreciate that quick-frozen foods should be stored at between 0°F.–5°F., nor that the ambient cabinet temperatures are not necessarily those of the packaged, frozen commodity.

Experience has shown that frozen food temperatures are commonly in the region of 20°–25°F. The temperatures of cooked meats in chilling cabinets are frequently above 50°F.

In all cases of poor temperature control, the importance of defrosting, regular temperature maintenance and the dangers of bacterial multiplication were stressed to shop managers and their employees.



## CLEANING ROUTINES IN FOOD PREMISES

Food premises inspections have repeatedly shown the need for guidance to shopkeepers and managers on correct cleaning methods.

Very few premises had supplies of detergents *and* sanitizing-bactericidal-agents; moreover, the differences between their properties were imperfectly understood.

A wide selection of detergents and sanitizing agents is available and literature produced by the major manufacturers, describing their products, has been accumulated by the district public health inspectors.

A selection of these leaflets is sent to persons having control of food premises, who are strongly advised to contact the representatives of the firms concerned.

In order to stress the importance of strict routines when cleaning equipment and utensils, wipeable posters have been produced for distribution to shops and catering establishments. A simple but effective cleaning routine is tabulated on the posters, which involves the separate use of detergents and germicidal agents.

A series of posters for more specialised cleaning routines is being planned.

The effect of scrubbing and scouring food premise equipment is demonstrated by a photograph of stainless steel, after light scouring with a scouring pad, at a magnification of 3,000. The photograph is reproduced below.

Similar photographs of other working surfaces show many surface defects, for example, craters and furrows, whose dimensions can easily trap bacteria and render thorough cleaning by physical means impossible.

To remove, and kill, as many bacteria as possible, soaking methods are best, provided some form of bactericide is incorporated. Detergents can remove most bacteria, but sanitising agents kill those which have not been removed by washing and rinsing. The added advantage is that soaking with the correct detergents/sanitizers does not cause physical deterioration of the surface being cleaned.



Stainless Steel lightly scoured  
with commercial scouring pad

X5000

“Stereoscan” photograph by  
courtesy of Dr. D. J. Arrow-  
smith, Dept. of Metallurgy,  
University of

Aston-in-Birmingham.



*FOOD HYGIENE (GENERAL)REGULATIONS 1960*

842 visits and re-visits were made to the various food premises to secure compliance with the requirements of the above Regulations. In 385 cases, contravention of the Regulations were found and appropriate notices were served on the persons carrying on the food business concerned.

During the course of the year conditions at one restaurant were found to be consistently unsatisfactory and legal proceedings were eventually instituted for several contraventions of the Regulations. Consequent upon an application for a period of disqualification, the Magistrates visited the premises on conclusion of the hearing. Although several of the specific charges had been dismissed, and the premises had been much improved since the original inspection, a period of one year's disqualification of the proprietor was nevertheless imposed by the Magistrates. An appeal against this penalty is still awaiting determination.

The following Table is included at the request of the Ministry of Health. Regulation 16 required suitable and sufficient wash-hand basins with hot and cold water, soap, nail brushes and clean towels to be provided.

Regulation 19 required suitable and sufficient washing facilities for food and equipment to be provided.

Category of premises	No.	No. of premises fitted to comply with Regulation 16	No. of premises to which Regula- tion 19 applies	No. of premises fitted to comply with Regulation 19
Bakehouses ....	18	18	18	18
Bread and cake shops ....	20	11	19	13
Butchers' shops ....	58	55	58	58
Cafes, Restaurants, Snack Bars ....	26	25	26	26
Clubs ....	42	42	42	42
Fish friers ....	45	44	45	45
Fishmongers ....	15	10	15	14
Grocers' shops ....	162	117	156	150
Industrial canteens ....	33	33	33	33
Licensed premises ....	85	84	85	74
School kitchens ....	15	15	15	15
Sweets and ice-cream shops	68	58	45	32
Supermarkets ....	19	19	19	19
Varous manufacturing premises ....	2	2	2	2

*FOOD COMPLAINTS*

No less than 46 complaints were received concerning the purchase of foodstuffs which were considered to be in some respect unsatisfactory. The more serious incidents were reported to the Related Health Services Committee and several warning letters were issued. In no case was it considered necessary to institute legal proceedings.

Bread and cakes were again the foodstuffs most frequently subject to complaint.



INSPECTION OF MEAT AND OTHER FOODS

It was found necessary to condemn the following foodstuffs, inspected in shops, warehouses, stalls, etc.:

					<i>tons</i>	<i>cwts.</i>	<i>lbs.</i>
Meat at wholesale premises	....	....	....	....	—	1	110
Meat at retail shops	....	....	....	....	—	18	8
Cooked meat and meat products	....	....	....	....	—	1	23
Canned meats	....	....	....	....	1	19	25
Other Canned Foods	....	....	....	....	3	14	67½
Fish (fresh)	....	....	....	....	—	13	107
Fruit and vegetables (fresh)	....	....	....	....	—	—	—
Other foods	....	....	....	....	2	2	15
TOTAL				....	9	11	19½

FOOD AND DRUGS SAMPLING

The routine sampling of food and drugs forms an important part of consumer protection. Food standards are checked by the Public Analyst to ensure that adulteration and dilution of standards is not taking place. The chemical and bacteriological quality of foodstuffs is under constant surveillance by the Inspectors. During the year the following items were sampled, and it is pleasing to record that it was not found necessary to institute legal proceedings under the substance, nature, and quality provision of the Food & Drugs Act (Section 2).

COMPOSITION AND QUALITY

Commodity	No. of samples taken	Number unsatisfactory	
		Analysis	Labelling
Meat pies .....	3	—	—
Meat products (brawn, etc.) .....	7	—	—
Sausages and sausage rolls .....	12	—	—
Tinned meats .....	10	—	—
Fish products (fish cakes, etc.)....	3	—	—
Butter, margarine, cheese, cream, yoghurt .....	6	—	—
Bread, cakes, cooking ingredients .....	9	—	2
Jams and preserves .....	8	—	—
Milk, evaporated milk, milk powder .....	8	—	—
Sweets .....	2	1	—
Dried vegetables .....	2	—	—
Soft drinks .....	1	—	—
Curry, sauces and spices .....	10	—	—
Ice cream .....	4	—	—
Dandelion coffee .....	1	—	—
Artificial colouring .....	3	—	—

BACTERIOLOGICAL

- 1. Total number of all samples taken: 18.
- 2. Results of ice-cream samples:

Grade	Mobiles				Premises			
	I	II	III	IV	I	II	III	IV
Soft Ice Cream .....	—	1	2	1	4	4	—	—
Other Ice Cream .....	—	—	—	—	—	—	—	—

- 3. Other foods:

Sample	No. taken	No. Unsatisfactory
Milk .....	6	—



## *COMPOSITION AND QUALITY OF FOOD AND DRUGS LIAISON WITH THE PUBLIC ANALYST*

Mr. R. Sinar, Warrington's Public Analyst, continued to give the Inspectors the benefit of his wide experience of analytical techniques, quality control, and the composition of food and drugs, and we could not carry out this aspect of environmental health control without his assistance.

The following extracts from the 1969 Annual Report of the Association of Public Analysts will give some indication of the invaluable assistance rendered to local authorities and their health inspectors:

“Public Analysts are involved in several aspects of the problem particularly the pollution of the atmosphere, the pollution of waterways and the pollution or contamination of growing crops either accidentally or by chemical sprays.

Since the time of the industrial revolution the rivers in industrial areas have been regarded as cheap and convenient means of disposal for industrial wastes as well as the effluents from sewage disposal plants.

Indiscriminate discharges have converted many of the rivers of Northern England and the lower reaches of the Thames into biological deserts. The seas into which they flow are in danger of falling into the same state unless rapid and firm action is taken. Analysis forms one of the essential links in the chain of remedial measures, as the data so obtained forms the basis of appraisal of the degree and nature of pollution and its probable source.

Atmospheric pollution is another environment hazard and analysis is even more important in this context as the degree cannot be assessed by visual observation of the direct effect on vegetable or animal life. The pollution of the atmosphere of our cities by the ever increasing volume of exhausts from motor vehicles is an aspect which has only been examined sporadically and not in depth. This is a study which could well be undertaken on a far greater scale by Public Analyst's laboratories, disposed as they are throughout the country and normally located in the large cities.

Impending legislation, relating to the health of industrial workers arising out of their environment or the materials which they handle, will require a large amount of analytical control.

The subject of pesticide residues in crops has been mentioned in earlier Annual Reports of this Association and the nation-wide survey of the level of pesticide residues ingested by the population should serve as a model for future surveys of a similar kind. The results of the first year's work has been published and the results of the second year's investigation is expected to be published during 1970.

During 1969 the organo-chlorine pesticides came to be regarded with growing disquiet, leading to the ban on D.D.T. for use in the home, garden or in vapourisers. The use of Aldrin, Dieldrin and D.D.T. should be restricted according to the recommendations of the Advisory Committee on Pesticides and other Toxic Chemicals. The problem is not a static one, new pesticides are evolved and placed on the market, established ones fall into disuse or at least into eclipse and the pattern of contamination changes. Although the initial surveys show that the level of contamination in this country is significantly lower than in the United States, this is no argument for relaxing the vigil. Climatic variations may favour the proliferation of certain pests resulting in



heavier usage of pesticides or changes in agricultural practice may have the same effect. It has been suggested that a third year's survey is unnecessary in the light of the results of the work so far done, but such complacency is unjustified. The cost of vigilance is minute compared with the issues at stake.

These are some of the ways in which Public Analysts are contributing their quota of effort to aid the fight for good environmental conditions.

## *FOODS*

Public Analysts were brought into being to ensure that food was not adulterated. In the first half of the last century, gross, fraudulent and often dangerous adulteration of food was rife. Over the last hundred years this social evil has almost entirely disappeared, but the need for Public Analysts has not lessened but rather increased. Their main concern nowadays is to maintain reasonable standards of composition, to prevent false and misleading claims being foisted on the public and to guard against contamination arising out of manufacturing or agricultural practices.

During 1969 there were few changes in legislation affecting the composition of food. The one which attracted the most public attention was the ban on cyclamates as artificial sweeteners which was imposed at the end of the year. This was a precautionary measure following certain unconfirmed work which alleged to show that consumption of massive amounts could give rise to irreversable and progressive effects on the body. Further long term work is being done in this country to prove or disprove the validity of these findings, but even if they are found to be invalid, it is doubtful if cyclamates can be reinstated—"give a dog a bad name...". The fundamental problem is that of attempting to prove a negative—that a given food additive cannot be harmful. By giving massive doses of salt, evidence could be deduced that it could be harmful and should be banned, although it has been in use for thousands of years and is in fact an essential article of diet. A cynic might be tempted to speculate on the probable fate of any other suggested artificial sweeteners or even on saccharin which has been in use for more than half a century.

This is not, however, a plea for more liberal use of food additives. As a general principle, Public Analysts are against a proliferation of permitted food additives and would like to see them restricted to a minimum. We therefore welcome the review by the Food Additives and Contaminants Committee of the use of butylated hydroxytoluene as an antioxidant and the uses of the antibiotics, nisin, nystatin and tetracyclines which are permitted preservatives in certain foods. The use of antibiotics in this manner may encourage the development of resistant strains of bacteria which may not be capable of control by antibiotics should occasion arise. Our experience is that, although legal, the use of these substances has been very limited.

The labelling of food poses many difficult problems, but the criterion must always be whether a given label is likely to mislead an intending purchaser. Proposals to amend the existing labelling of Food Order (1953) have been beset by repeated postponements and further amendments which always seem to lessen the force of the proposed Regulations. An example of this is the use of the term "home made".



Original proposals would not have permitted the application of this term to mass-produced foods, but in the latest Regulations this ban has been discarded. How “ready” is a “ready meal”? Initially a “ready meal” only required heating up, but it is now being extended to include preparation which could take perhaps 30 minutes. We deplore the gradual debasement of these terms and feel that Labelling Regulations should be formed to prevent it. Many other well-intentioned proposals such as a requirement to print certain essential information in a certain size of type on a contrasting background are eventually watered down to vague terms as “conspicuous” or “clear and conspicuous”, which are open to a range of interpretations. This use of undefined general terms always leads to virtually unsurmountable difficulties, because Local Authorities are very reluctant to take legal proceedings the outcome of which depends on the interpretation of the meaning of words in legal documents.

## *DRUGS*

Earlier Annual Reports have recounted the efforts of this Association to establish the principle that the control of drugs should be in the hands of independent Authorities as in the case of the Food and Drugs Act. The effect of the Medicines Act will be to remove them from the Food and Drugs Act, so that the latter will become a Food Act. This narrowing of the scope is in direct contrast to the U.S. legislation where the main Act is extended to include cosmetics. The Medicines Act is not yet operative as a great deal of preliminary work is necessary before the “appointed day” can be fixed. It is gratifying to note that this Association has been consulted regarding the composition of the main Commission and no doubt will be regarding the Expert Committees.

## *“BREATHALIZER TESTS”*

Public Analysts are frequently called upon to make independent tests on specimens of blood taken under the Road Safety Act. Criticisms of the procedure have been voiced in our Annual Reports, particularly the report for 1967. Many legal decisions have created loopholes in the Act although more recent decisions in the House of Lords have had the effect of plugging some of these.

There has been some improvement in the procedure in that a higher proportion of samples are received in properly sealed envelopes, often bearing the advice that, if the accused wishes it to be analysed, it should be kept in a cool place and submitted for analysis within 5 days. However a sealed envelope can readily be unsealed and resealed and the capsule can be opened and reclosed without any apparent sign of tampering.

Not only is the capsule far from “tamper proof” but owing to the method and material of construction, it permits evaporation. Alcohol being more volatile than blood evaporates more readily and analysis after a lapse of time results in a lower figure. This lower figure is of little use to the defence as it can be swept aside by saying that it was “due to evaporation”. Many defendants are so convinced of their innocence that they do not have recourse to an independent analyst until a Summons is received several weeks after the event. The Road Safety Act requires that the specimen shall be placed in a “suitable container”. Is a container which cannot be sealed and which permits evaporation



“suitable”? An adverse ruling on this point by the High Court could wreck this system. No great ingenuity would be required to devise a suitable container which would be free from the serious defects of the present one.

The Royal Institute of Chemistry in conjunction with this Association and in consultation with the Home Office has produced a more comprehensive brochure giving a list of laboratories willing to analyse the defendant's sample. This should be in the hands of all Police Forces who should be in a position to advise defendants accordingly.

### *TOYS*

The Toys (Safety) Regulations, 1967, designed to prevent the use of toxic paints on toys or the use of highly inflammable plastic (celluloid) except for certain specified applications (table tennis balls), have been the subject of discussion between this Association and the Government Laboratory. Two years of experience have revealed difficulties and imperfections. Thin printed films contain perhaps only one tenth the amount of pigment per unit surface area when compared with brush-painted toys, but are subject to the same limits for metal content.

Would it be more logical to express the limits on an area, rather than on a weight of film? Unfortunately the difficulty of accurate measurement of surface area of small irregular toys makes the logical method impracticable. The selection of toxic metals specified in the Regulations includes some of which are of low toxicity but excludes some of high toxicity; amendments should be made.

From the point of view of enforcement, difficulties arise because of variation in composition not only from toy to toy but also even over the surface of the same toy. Unlike Foods or Drugs, toys cannot be divided into three identical parts.

### *FERTILISERS AND FEEDING STUFFS*

After a period of relative stagnation following the 1926 Fertilisers and Feeding Stuffs Act, the last few years have seen vast changes in the requirement of the Act as laid down in Regulations made under the Act and the present Agricultural Bill before the House will eventually replace the Act. In addition to major constituents of the product, minor components such as trace elements, drugs (including coccidiostats, anti-black-head drugs, hormones, etc.) and other additives must be declared and require checking. This has placed an enormous extra burden on the shoulders of Public Analysts acting in their capacity as Official Agricultural Analysts, but at the same time makes the Act more effective and meaningful.

The new Agriculture Bill, if it goes through in its present form, promises to be a more effective instrument than the present Fertilisers and Feeding Stuffs Act. This Association has made representations designed to effect further improvements.

### *TRADE DESCRIPTIONS ACT*

This Act, which came into force at the end of 1968, makes it an offence to supply with any goods offered for sale a statement, whether written or verbal, that in any way misdescribes the goods or is inaccurate as regards their quality, fitness for purpose, or in almost all other particulars. The responsibility of enforcing the Act is laid on Local



Authorities, and this has thrown a heavy burden on their Officers. In particular, it has meant that Public Analysts are receiving a wide variety of products for analysis, including petrol and paraffin, paints, fabrics, cosmetics and household cleaning materials. Some of these problems cannot be solved by chemical analysis; but Public Analysts are meeting the challenge well and are exercising much ingenuity in devising methods of analysis and investigation that will answer the necessary questions. This increase in their duties, however, is straining the resources of their laboratories, and if the work under this Act continues to grow at the present rate, an increase in staff will be inevitable

During 1969 the views of this Association were sought by various Government Departments, in particular the Ministry of Agriculture, Fisheries and Food, the Ministry of Health, the Home Office, etc., on a variety of topics arising mainly out of proposed legislation or amendments to existing legislation.

We also maintained close contact with the Local Authorities Associations and with kindred professional and scientific bodies. Our members serve on many committees outside the Association, such as those of the British Standards Institution and the Codex Alimentarius, to name but two.

The Journal of the Association of Public Analysts has a world-wide circulation although the numbers are relatively small. In this respect it reflects the Association's position as a small specialist Association, wide-ranging in its interests and probably exercising an influence out of proportion to its numerical size.

We like to think that the spirit of service to the community which inspired the small handful of dedicated men who founded the then Society of Public Analysts nearly 100 years ago, is still alive in us today, for on the efforts of so few so much depends."

## SANITATION

### REPAIR OF PROPERTIES—INVESTIGATION OF COMPLAINTS

The Inspectors dealt with the following matters during the year:

<i>NATURE OF INSPECTION</i>	No. of Inspections
<i>DWELLING HOUSES</i>	
(i) general external repairs....	2,727
(ii) general internal repairs ....	1,882
<i>SEWERAGE AND DRAINAGE</i> e.g. drain repairs, testing, renewals ....	893
<i>PLUMBING, W.C.'s., HOT &amp; COLD WATER SUPPLIES</i> e.g. repair and maintenance ....	428
<i>REFUSE, ACCUMULATIONS, DEPOSITS</i> e.g. removals, clearing sites ....	367
<i>CLEANSING OF PREMISES</i> e.g. filthy and verminous ....	116
<i>MISCELLANEOUS</i> e.g. refuse tips, brooks, water courses, offensive trades ....	272
<b>TOTAL</b> ....	<b>5,885</b>
<i>NO. OF INFORMAL PUBLIC HEALTH ACT NOTICES SERVED</i> —776	
<i>NO. OF FORMAL PUBLIC HEALTH ACT NOTICES SERVED</i> —793	
<i>REPAIR OF HOUSES BY PUBLIC HEALTH ACT PROCEDURE</i>	
(a) After informal action by District Inspector ....	189
(b) After formal notice by District Inspector ....	640

Members will note the number of inspections relating to the provision of basic amenities e.g. hot and cold water, drainage, and general repairs. As a matter of prudent management approximately 6,000 visits should be linked to the “improvement grant” system and treated as a routine matter to relieve the slum clearance burden.

### PUBLIC CLEANSING

Mr. W. Whitfield, F.Inst.P.C., M.R.S.H., Cleansing Superintendent, has provided the following information:

“Labour difficulties continued throughout the year 1968/69 which meant that the routine weekly collection was not stable.

The weights of refuse collected during the year ended March, 1969 (52 weeks) were:

House Refuse—20,843 tons.

Trade Refuse— 1,097 tons.

During 1969 the Corporation Work Study staff commenced work in the Department and presented an incentive bonus scheme which has been accepted and will be put into operation early in 1970.



Whilst the above weights show a reduction compared with the previous year, it is because the period covered is for 52 weeks compared with 53.

Actually, the weight of refuse being produced has commenced to increase; the volumes of waste continued to increase but encouragement is being given to increased separation of waste paper. Controlled tipping continued throughout the year."

## *RODENT AND PEST CONTROL*

The Pest Control Assistants dealt with 773 complaints of rodent infestation and 173 complaints of insect and other miscellaneous infestations, both these figures showing a slight reduction when compared with the 1968 figures.

Almost all infestations are of a minor nature but control of outbreaks is frequently hindered by the following:

1. Garden sheds and outbuildings with floors which are not raised above ground level.
2. Back street ash bin stores kept in an untidy condition, for example, ash bin lids missing. Shortage of staff at the Cleansing Department has resulted in occasional instances of prolonged accumulations of refuse which could provide a source of food for rats, and certainly attract them to the area.
3. The sites of old property waiting for redevelopment or demolition are frequently used for the dumping of waste matter by inconsiderate neighbours. Watercloset pans are frequently broken, exposing open drains. The water seals of undamaged watercloset pans are sometimes found to have dried up—once more providing easy access for rodents into and out of the sewerage system.

The only infestation of any proportions is on the Corporation tip. This is encouraged by refuse being left exposed and uncovered for long periods. The Cleansing Department is suffering staff shortages and perhaps requires more earth moving equipment.

There have been no changes in poisons or techniques during the year, and mice continue to be more difficult than rats to eradicate. The contract scheme for the survey and treatment of business premises has been greatly expanded, and by mid-1970 a total of twenty-two firms, totalling sixty separate premises, will be included in the scheme, compared with ten firms, totalling ten premises, at the beginning of 1969. The annual income from contracts has likewise increased from a total of £95 0s. 0d. to a total of almost £550 0s. 0d.

The perennial practical difficulties of opening manholes in order to carry out sewer treatment for the destruction of rats are still with us, namely:

- (i) Tarmacadam either partly or completely covering the manhole cover;
- (ii) the wide variety of types of manhole cover—sewer treatments would be carried out with far less difficulty if all manhole covers could be converted to the single crowbar lift, non-rocking type.

There have been no difficulties so far as actually poisoning the common rat in sewers is concerned; Fluoracetamide is used. In 260 (a 10% sample) manholes which were recently test baited in the areas outside the town centre, only two probable "takes" were discovered. 67 town centre manholes were treated by direct poisoning without pre-baiting.

No major problems presented themselves during the year with regard to insect pests but the increasing occurrence of the Carpet Beetle and Golden Spider Beetle has been noted.

The Golden Spider Beetle in domestic premises seems to find every available corner, and once the beetle infests a house a thorough treatment of the house from top to bottom is nearly always needed.

The pesticides used are satisfactory.

## *PUBLIC SWIMMING BATHS*

The following information has been provided by Mr. R. E. Daggett, M.Inst.B.M., Baths Manager and Engineer:

“The baths provision consists of 4 swimming pools, 19 private bathrooms and 1 vapour suite. The four swimming pools contain a total of 270,000 gallons of water and are filled from the town's domestic supply. The water in the swimming pools is treated by continuous filtration. Water from the deep end of the pools is drawn by a pump through a strainer and, after the addition of coagulants to flocculate organic matter and to ensure efficient filtration, the water is pumped to the top of the filter units. The filter units comprise 4 x 10 ft. 0 in. diameter vertical cylinders containing sand and a system of collecting pipes in the bottom which discharge the water after it has filtered through the sand. The water is then aerated, reheated and chlorinated before being returned to the shallow end of the pool. The sand in the filters is washed when necessary by reversing the flow of water which runs to waste during the process. To secure efficient filtration, coagulants in the form of sulphate of alumina and sodium carbonate are added to the water. Break point chlorination is used continuously, the chlorination being applied in the form of chlorine gas. The frequency of change of water in the pool is five hours.

At all times it is aimed to maintain in the swimming pool water sufficient free and available chlorine to meet any possible pollution, a pH value of 7.5 to 7.6, and a residual alkalinity of not less than 200 ppm.

The standards have at all times on examination been in accordance with those recommended in Report No. 71 of 1956 concerning the bacteriological examination of water supplies.”

## *PHARMACY AND POISONS ACT 1933*

The Pharmaceutical Society Inspector visited the fifty-three premises registered to sell Part II poisons, and reported several minor irregularities which are receiving his attention. An application to sell Part II poisons from mobile shops had to be refused on the advice of the Chief Inspector of the Pharmaceutical Society, as registration for the sale of Part II poisons is clearly restricted to “premises” by virtue of section 21 of the above Act.

## *SHOPS ACT 1950*

The Sunday Trading provisions of the Shops Act continue to be ignored by some traders, who are providing a service which is obviously demanded by the public. There appears to be no prospect of an early revision of this part of the Shops Act.



*LICENSING ACT 1961 ; CINEMATOGRAPH ACT 1909 ;  
PET ANIMALS ACT 1951 ; ANIMAL BOARDING ESTABLISHMENTS  
ACT 1963*

Duties were carried out under the provisions of the above Acts, including inspection of premises, issue of licences and the keeping of registers.

### *BETTING SHOPS*

When initially established, betting shops are subject to a joint inspection by representatives of the Health and other departments. Likewise, on change of the licensee, or the carrying out of structural alterations, a joint inspection is carried out. Smaller betting shops are frequently found to be established in poor quality property, and have low standards of decoration and equipment. Fortunately, because of slum clearance and possibly for economic reasons, some of the smaller and poorer betting shops have recently gone out of existence.

### *WATER SUPPLIES*

Under the provisions of Section 148 of the Public Health Act 1936 and Water Act 1955, it is the duty of the local authority to ensure that every dwelling in the district is provided with a suitable water supply. Mr. W. F. Thacker, F.I.C.E., M.I.W.E., has supplied the following information:

“The Northern part of the borough is supplied from wells, and adits at Winwick and Houghton Green Pumping Stations, and also from boreholes at Forest Farm, Croft, Kenyon and Lymm Pumping Stations. The Southern area of the borough is supplied from boreholes at Foxhill and Newton Hollow Pumping Stations in the Frodsham area, and augmented by bulk supplies from Liverpool Corporation aqueducts at (a) Norton and intermittently (b) Aston. The water supplied to consumers during 1969 has been satisfactory in quantity and quality.

During 1969 the following analyses have been made:

- (a) from sources and supply reservoirs—18 chemical;
- (b) from random points in the distribution system within the borough—3 chemical and 12 bacterial.

All water supplies are chlorinated. No instances of contamination were encountered during 1969. There are no stand pipe supplies within the Borough. Chemical tests for lead from random points supplied by all sources were negative. There is only a trace of fluoride in the supply.”

HOUSING

CLEARANCE OF UNFIT HOUSES  
PROGRAMME FOR 1969

It was proposed by the Joint Committee of Officers that the following areas be represented as unfit during 1969, subject to the staff being able to cope with the inspections and administrative procedures. It will be appreciated that in the majority of cases between one and two years elapses between representation of the houses and the actual rehousing of the families.

AREA	Anticipated Date of Representation	Number of Houses Involved	
		PINK	GREY
<i>WHITECROSS AREAS</i> 1, 2, 3, 4 & 5 (to complete East of Lovely Lane) ....	JANUARY/ FEBRUARY	164	12
<i>MELVILLE ST. AREA</i> Watkin St., Forster St., Bowes St., Hale St., Melville St. ....	FEBRUARY/ MARCH	76	—
<i>HOWLEY NO. 2 AREA</i> Greenall St., Brook St., Ellesmere St., Howley Lane, Gibson St., Egerton St., Church St. ....	APRIL/MAY	73	2
<i>WELLINGTON ST. AREA</i> Napier St., Lord Nelson St., Parr St., Admiral St. (to com- plete clearance of Old Howley)	AUGUST/ SEPTEMBER	130	22
<i>MOUNT ST./GOLBORNE ST.</i> Mount St., Regent St., Legh St. ....	SEPTEMBER/ OCTOBER	24	—
<i>DALLAM LANE AREA</i> Owen St. ....	SEPTEMBER/ OCTOBER	24	—
<i>BATTERSBY LANE AREA</i> Lythgoes Lane, Clare's Buildings, Hopwood St., Battersby Lane, Derby St. ....	OCTOBER/ NOVEMBER	62	—
<i>ACADEMY STREET AREA</i> Rigby St., Academy St., Mersey St. ....	DECEMBER	15	—
	TOTAL ....	568	36



EFFECT OF DELAYS IN NEW HOUSE BUILDING  
ON CLEARANCE PROGRAMME

The greatest impediment to the clearance programme in Warrington is the complete absence of reliable forecasts of the number of new houses likely to be available during any given period to replace those which are being demolished. Over the last few years innumerable inaccurate forecasts have been made which have caused much confusion and made nonsense of the published programme.

An Interdepartmental Liaison Committee of Officers was formed to try to overcome these difficulties, but despite their efforts at co-ordinating information it was found to be necessary in October to recommend a temporary suspension of representations due to unforeseen delays in the completion of new houses. At the time of making this recommendation to the Council some 640 families were awaiting urgent rehousing from clearance areas dealt with by the Council, i.e. in which all the statutory formalities had been completed. It was reported that in consequence the Council would be unable to deal with the most urgent clearance problems in Old Howley. Some 355 families living in some of the worst houses in the town will not now be rehoused until 1972.

The compensation provisions of the Housing Act, 1969 are such that it is most important that we know which houses in the town we can represent as unfit during any given 2 year period. The simplest method to avoid confusion among owners, occupiers and potential purchasers is to publish the projected 2 year programme.

The following programme was made public in 1969:

SUMMARY OF CLEARANCE AREAS TO BE REPRESENTED  
DURING THE TWO YEARS COMMENCING JANUARY, 1970  
(NOT NECESSARILY IN CHRONOLOGICAL ORDER)

AREA	No. of Houses
WHITECROSS NO. 6	204
WEST STREET	203
HOWLEY NOS. 3 to 8	66
WAKEFIELD STREET	87
DALLAM LANE	24
BEWSEY STREET	14
BATTERSBY LANE	62
HOWLEY NOS. 9 & 10	86
MARGARET STREET	68
HOWLEY NO. 2	34
GOLBORNE STREET	13
ACADEMY STREET	14
BARRY STREET	49
NEW ROAD	76
SCHOOL BROW	23
TOTAL	1,023

The unreliability of the forecasted supply of new houses has had the effect of restricting our representation during 1969 and the first nine months of 1970 to the following clearance areas:

<i>Whitecross (Areas Nos. 1 to 5)</i>	....	....	A total of 176 houses
<i>Melville Street (Areas Nos. 1 &amp; 2)</i>	....	....	A total of 82 houses
<i>Hamilton Street</i>	....	....	A total of 19 houses
<i>Whitecross (Areas 6 &amp; 7)</i>	....	....	A total of 202 houses
Total over the 21 month period			479 houses

Additionally a small number of individually unfit properties have been represented.

At August, 1970 it has been possible to deal only with Whitecross Area No. 6 (now known as 6 & 7) and Golborne Street from the published programme. At the present rate of progress of building new houses it seems most unlikely that the Council can achieve its published target for the clearance of unfit houses.

Severe practical difficulties are caused by these delays. As soon as a house has been represented or reported to the Housing Committee for statutory clearance action the owner's interest in keeping the property wind and weatherproof diminishes and the occupiers, not surprisingly, lose interest in maintenance. With delays of over two years between commencing clearance procedures and actual rehousing, the position for many tenants becomes impossible. It is ironical that our desire to rehouse the occupants of unfit houses in better homes results, at least for a limited period, in their having to live in even worse conditions than formerly. If delays of this duration are to continue the Council ought seriously to consider the merits of "deferred demolition"—a system whereby the Council take over the unfit houses during the period between "representation" and demolition and keep them wind and weatherproof.



*DETAILS OF THE CLEARANCE AREAS REPRESENTED  
BY THE CHIEF PUBLIC HEALTH INSPECTOR  
DURING 1969 ARE AS FOLLOWS:*

*WARRINGTON (WHITECROSS) CLEARANCE AREAS*

*NOS. 1, 2, 3, 4, 5*

*No. 1 Area*

<i>Green Street</i>	31, 33, 45, 47, 49, 53, 55.
<i>Lovely Lane</i>	1, 5, 7, 9.
<i>Bostock Street</i>	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39.
	2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30.
<i>Selby Street</i>	1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23.

*No. 2 Area*

<i>Bostock Street</i>	57, 59, 61, 63, 65, 67, 69, 71, 73, 77, 79, 81, 83, 85, 87, 89, 91, 93, 97, 99, 101, 103, 105, 107, 109, 111, 113, 115, 117, 119, 121.
	82, 84, 86, 88, 90, 92, 94, 96.

*No. 3 Area*

<i>Aikin Street</i>	3, 5, 7, 9.
---------------------	-------------

*No. 4 Area*

<i>Priestley Street</i>	55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77. 62, 64, 66, 68, 70, 72, 74, 76, 78.
<i>Fitchett Street</i>	2.

*No. 5 Area*

<i>Green Street</i>	19, 21, 23, 25.
<i>Garibaldi Street</i>	2, 4, 6, 8, 10, 12, 14, 16, 18. 1.
<i>Priestley Street</i>	1, 3, 5, 7, 9, 11, 13 15 17, 19, 21, 23, 25, 27, 29.

*WARRINGTON (MELVILLE STREET) CLEARANCE AREAS*

*NOS. 1 & 2*

*No. 1 Area*

<i>Bowes Street</i>	18, 20, 22, 24, 26, 28, 30.
<i>Forster Street</i>	15, 17, 19, 21, 23, 25, 27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47.
<i>Hale Street</i>	34A.
<i>Melville Street</i>	20, 22, 24, 26, 28, 30, 32.

*No. 2 Area*

<i>Melville Street</i>	1, 3, 5, 7, 9, 11, 13, 15, 17.
<i>Hale Street</i>	2, 4, 6, 8, 10, 12, 14, 16, 18.
<i>Watkin Street</i>	30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70.

*WARRINGTON (HAMILTON STREET) CLEARANCE AREA*

<i>Hamilton Street</i>	27, 29, 31, 33, 35, 37, 39, 41, 43, 45, 47, 49, 51, 55, 57, 59, 61, 63, 65.
------------------------	--

*INDIVIDUALLY UNFIT HOUSES REPRESENTED DURING 1969*

<i>Admiral Street</i>	1, 3, 5, 7, 9, 11, 13, 15, 17. 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24.
<i>Allen Street</i>	46.
<i>Brick Street</i>	49, 53, 55.
<i>Church Street</i>	87/89.
<i>Dallam Lane</i>	71.
<i>Ellesmere Street</i>	57.
<i>Gaskell Street</i>	2, 4.
<i>Hopwood Street</i>	31.
<i>Dallam Lane</i>	71.
<i>Liverpool Road</i>	65/67, 69, 71.
<i>Longford Street</i>	58, 60.
<i>Marson Street</i>	26.
<i>Rose &amp; Crown Street</i>	16.
<i>School Brow</i>	97, 99, 101, 103. 92.
<i>Wilson Patten Street</i>	35.
<b>TOTAL ....</b>	<b>44.</b>

*COMPULSORY PURCHASE ORDERS CONFIRMED DURING 1969*

- Warrington (Old Bewsey) (No. 3) Compulsory Purchase Order.
- Warrington (Old Bewsey) (No. 4) Compulsory Purchase Order.
- Warrington (Liverpool Road) Compulsory Purchase Order.
- Warrington (Howley) (No. 1) Compulsory Purchase Order.
- Warrington (John Street) Compulsory Purchase Order.
- Warrington (Winwick Road) Compulsory Purchase Order.
- Warrington (Whitecross) Compulsory Purchase Order.

*HOUSES DEMOLISHED DURING 1969*

Clearance Areas ....	85
Individual Unfit Houses ....	140
	<hr/>
	225
	<hr/>



*RENT ACT 1957*

No applications concerning certificates of disrepair were received during 1969.

*ENQUIRIES CONCERNING PROPERTIES*

The Department dealt with 1,827 enquiries concerning property, made up as follows:

1.	Land Charges Act 1925	....	....	....	....	....	883
2.	Housing (Financial Provisions) Acts, 1958 and 1959—						
	Council mortgages	....	....	....	....	....	147
3.	Improvement Grants	....	....	....	....	....	194
4.	Routine enquiries concerning the expected life of property	....					517
5.	Requests for further information and detailed inspections	....					86

*CLEARANCE STATISTICS—1st January, 1965 to 31st December, 1969*

1.	Number of houses represented as unfit	....	....	....	....	1,798
2.	Number vacated during the period	....	....	....	....	1,199
3.	Number of families in 1 above awaiting rehousing at 31.12.69	....				599

These figures do not include houses cleared for road improvement schemes.

# OFFICES, SHOPS AND FACTORIES

## OFFICES, SHOPS AND RAILWAY PREMISES ACT, 1963

*Enforcement of the Act during 1969:*

The re-organised system of re-inspections reported last year was continued according to the programme. This involved the complete re-inspection and checking of records for a further one-third of all registered premises, and this was duly accomplished.

No difficulties or unusual circumstances were encountered. Unsatisfactory conditions again mainly concerned maintenance, replacement of mislaid thermometers and abstracts, and re-furnishing first-aid kits. Informal action taken covered 461 items in 213 premises, whilst 473 items in 233 premises were remedied. No formal action or legal proceedings were required.

New registrations during the year amounted to 81 and these related to changes of use or occupation, and, in a few instances, to newly established businesses or premises not previously registered. On the other hand 73 premises were removed from the Register due to change in use or occupation, and closure or clearance of old property.

Nineteen accidents were reported and investigated. None was of a serious character, being principally involved with falls, handling and transporting goods, and the use of hand tools, and were mainly connected with personal error of judgement or carelessness—matters which no advice, precaution or legislation will ever eradicate. In six instances advice was given and taken on safety measures, whilst in one instance a written request concerning a structural improvement was necessary.

The statistics detailing the years work are appended below:

### (A) REGISTRATIONS, INSPECTIONS AND NOTICES

Class of premises	No. of premises			No. of visits			No. of notices	
	Newly regstrd.	Dele- ted	Remaining on registr.	General inspns.	Accident investns.	Re-visits etc.	Ser- ved	Complied with
Offices	33	20	273	137	2	121	75	78
Retail shops	36	47	450	240	14	235	112	131
Wholesale/ warehouses	2	2	42	17	1	25	8	9
Catering estab. & canteens	10	4	97	51	2	44	18	15
Fuel storage depots	—	—	—	—	—	—	—	—
TOTAL:	81	73	862	445	19	425	213	233



(D) ACCIDENTS

(i) Number reported and action taken

Workplace	Number reported		Total Number Investi- gated	Action recommended			
	Fatal	Non-fatal		Prosecu- tions	Formal Warning	Informal Advice	No Action
Offices ....	—	2	2	—	—	2	—
Shops ....	—	14	14	—	—	4	10
Wholesale shops and warehouses	—	1	1	—	—	—	1
Catering establishments	—	2	2	—	1	—	1
TOTAL ....	—	19	19	—	1	6	12

(ii) Analysis of Cause

Cause	Offices	Shops	Wholesale/ Warehouse	Catering
Machinery ....	—	—	—	—
Transport ....	—	—	—	—
Falls of persons	—	3	—	—
Slipping or striking against object or person ....	2	2	—	2
Handling goods	—	4	1	—
Use of hand tools	—	5	—	—
TOTAL ....	2	14	1	2

(B) ANALYSIS OF PERSONS EMPLOYED IN REGISTERED PREMISES

Class of workplace	No. of persons employed
Offices ....	2,504
Retail Shops ....	2,708
Wholesale departments, warehouses ....	428
Catering establishments open to the public	741
Canteens ....	37
Fuel storage depots ....	—
Total 6,490	
Total Males 2,702	Total Females 3,788

(C) ANALYSIS OF CONTRAVENTIONS

Section	Contraventions	
	Found	Complied with
4. Cleanliness ....	35	29
5. Overcrowding ....	—	—
6. Temperature ....	54	61
7. Ventilation ....	8	9
8. Lighting ....	7	5
9. Sanitary conveniences ....	41	48
10. Washing facilities ....	28	31
11. Supply of drinking water ....	2	1
12. Clothing accommodation ....	3	4
13. Sitting facilities ....	2	2
14. Seats (sedentary workers) ....	—	1
15. Eating facilities ....	3	3
16. Floor, passages, stairs ....	44	43
17. Fencing of exposed parts of machinery ....	2	3
18. Protection of young persons from dangerous machinery ....	—	—
19. Training of young persons working at dangerous machinery ....	—	—
23. Prohibition of heavy work ....	—	—
24. First aid ....	132	128
50. Display of Abstracts ....	100	107
TOTALS ....	461	473
EXEMPTIONS AND PROSECUTIONS: Nil		



**FACTORIES ACT 1961**

The following statistics are required by the Ministry of Labour:

Premises	Number on Register	Number of		
		Inspections	Written notices	Occupiers prosecuted
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities	4	1	—	—
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority	325	75	9	—
(iii) Other premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	30	16	1	—
TOTAL	359	91	10	—

Particulars  (1)	Number of cases in which defects were found				Number of cases in which prosecutions were instituted (6)
	Found (2)	Remedied (3)	To H.M. Inspector (4)	By H.M. Inspector (5)	
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary conveniences:					
(a) Insufficient	1	1	—	—	—
(b) Unsuitable or defective	10	8	—	10	—
(c) Not separate for sexes	—	—	—	—	—
Other offences against the Act (not including offences relating to Outwork)	—	—	—	—	—
TOTAL	11	9	—	10	—

Outwork  
 (Sections 133 and 134)

The one remaining outworker ceased to operate at the end of 1968 and there is nothing to report.

